

UNITED PACIFIC ENVIRONMENTAL

MANAGEMENT & CONSULTING SERVICES

SC
10/26/97

2699 E. 28TH ST., SUITE #405
SIGNAL HILL, CA 90806
(310) 981-3346
(310) 427-5806 Fax

September 12, 1997

Ms. Brenda Nelson
Santa Fe Springs Fire Department
11300 Greenstone Avenue
Santa Fe Springs, CA 90670

Hazardous Material Underground Storage
County of Los Angeles, Dept. of Public Works
P. O. Box 1460
Alhambra, CA 91802-1460

Subject: Underground Storage Tank Removal, Earl's Manufacturing Co., Inc.
11862 Burke Street, Santa Fe Springs, California, 90670
LA DPW File No. 14977-15839, Permit 187029

Dear Inspectors:

The following is a report of the underground storage tank removal at Earl's Manufacturing Company, Inc.'s facility at 11862 Burke Street, Santa Fe Springs, California (Referred to as SITE). This work was performed for Earl's Manufacturing Company, Inc. The contact and mailing address for Earl's Manufacturing is Ms. Claudette Earl, Earl's Manufacturing Company, Inc., 11876 East Burke Street, Santa Fe Springs, CA, 90670. Please note that the mailing address for Earl's Manufacturing is located immediately east of the SITE.

BACKGROUND

The site is located on the south side of Burke Street in a primarily industrial area (Figure 1, Site Location Map). The site is located at an elevation of 150 feet above sea level.

The County of Los Angeles, Department of Public Works, Coastal Plain Deep Aquifer Ground Water Contour Map for Fall 1993 shows ground water at an elevation of approximately 110 feet above sea level. The implied ground water gradient is to the south.

Information regarding nearby wells was requested from the County of Los Angeles Department of Public Works, Hydraulic/Water Conservation Division during a telephone call on September 11, 1997. The closest well monitored by the Hydraulic/Water Conservation Division is Well 165K. Well 165K is located approximately 3000 feet southeast of the site, on or near the high school adjacent to Painter Avenue and Mulberry Drive (Slauson Avenue). Ground water was last measured at a depth of 24.0 feet in the well from a surface elevation of 141.0 feet on April 26, 1996.

Based on the above information it is estimated that ground water is a depth of 24 to 40 feet below the ground surface at the subject site.

Based on Division of Oil, Gas, and Geothermal maps the site is located between the Santa Fe Springs Oil Field and the Whittier Oil Field. The site is approximately 3,000 feet north of the northern boundary of the Santa Fe Springs Oil Field.

The 1,000 gallon underground storage tank (UST) was located on the south side of the building at 11862 Burke Street. (Figure 2, Site Plan). The tank was apparently filled by inverting an elbow attached to the vent pipe on the adjacent building. The tank was used to store "Trim Sol". A copy of the MSDS for Trim Sol is attached in Appendix A.

TANK REMOVAL

Previous to July 1, 1997 the County of Los Angeles, Department of Public Works (DPW), was the lead agency for enforcement of state, federal, and local underground storage tank laws in the City of Santa Fe Springs. After July 1, 1997 and following the "Certified Unified Program Agencies" (CUPA Program) the City of Santa Fe Springs Fire Department became the lead agency for enforcement of state, federal, and local underground storage tank laws in the City of Santa Fe Springs.

An underground storage tank removal permit was originally obtained from the Los Angeles County DPW on March 20, 1997. An underground storage tank removal permit was also obtained from the City of Santa Fe Springs on April 20, 1997. Copies of the permits are attached in Appendix B.

The surface material was removed and the top of the tank was exposed on July 17, 1997. The tank was found to be oriented east-west, not north-south as had originally been anticipated. Approximately one foot of a semi-solid sludge was found in the bottom of the tank. Based on high LEL readings it was determined by field personnel that the tank may contain materials other than Trim Sol.

On July 18, 1997 a semi-solid sludge sample was obtained from the bottom of the tank using a PVC cup (90 degree elbow) attached to a five foot PVC pipe. The sample was placed immediately into a Teflon capped glass jar. The sample was labeled "Tank" and then sealed in plastic bag. The sample was handed to an on-site employee/courier for Advanced Technologies Laboratory (ATL). The ATL courier placed the sample in a chilled container and immediately transported the sample to ATL's laboratory for analysis.

The tank sample was analyzed for volatile organic compounds (VOC's) in accordance with EPA method 8260, priority (CAM 17) metals in accordance with EPA methods 7471 and 6010, hydrocarbon range from C6 to C40 in accordance with a modification of EPA method 8015B, and pH in accordance with EPA method 9045.

The results of the VOC analysis are summarized in Table 1. The results of the metal analysis are summarized in Table 2. The results of the C6 to C40 analysis is shown in Table 3. The complete laboratory report including quality assurance/quality control data, and chain-of-custody data are attached in Appendix C. The pH of the sample was found to be relatively acidic, 4.25.

These results of the analysis of the "Tank" sample indicate that the tank contained oil sludge and solvents (VOC's) including 1,1 Dichloroethane (1,1 DCA), tetrachloroethylene (PCE), 1,1,1 Trichloroethane (111-TCA), and Trichloroethylene (TCE), and minor amounts of Toluene, Xylene, Ethyl Benzene, and other compounds. The other compounds appear to be breakdown products of 1,1 DCA, PCE, 111-TCA, and TCE or compounds commonly found in industrial grade supplies of these chemicals.

The sludge was removed and the tank was triple rinsed by GV Adams Services, Inc. on August 13, 1997. The manifests, signed by the receiving facility, for the sludge and tank rinsate is attached in Appendix D.

The 1,000 gallon tank was removed from the excavation on August 13, 1997. The tank removal was witnessed by Inspector Brenda Nelson from the City of Santa Fe Springs Fire Department. The underground storage tank was intact and only moderate rusting was noted on the tank. The tank was transported by GV Adams Services, Inc. to Adams Steel for destruction and recycling of the metal. The tank and piping destruction certificates are attached in Appendix E.

SOIL SAMPLING

One soil sample was obtained from four feet below the bottom of each end of the tank on August 13, 1997. The samples were obtained from the excavation with a backhoe. Samples were then obtained by driving brass tubes directly into relatively undisturbed soil within the backhoe bucket. Upon retrieval of the sampler, the ends of the brass tube were covered with Teflon tape and capped with an inert lid. The samples were labeled, placed in sealable plastic bags, and stored in a chilled container. The sample was delivered to a state certified laboratory the same day, following chain-of-custody procedures. Fire Inspector Brenda Nelson of the City of Santa Fe Springs Fire Department directed/witnessed the obtaining of the soil samples.

The soil immediately below the tank was a sandy silt. A moderate solvent like odor was noted in the soil during the soil sampling process.

The two soil samples from the tank excavation were analyzed for Total Recoverable Petroleum Hydrocarbons (TRPH) in accordance with EPA methods 418.1 and volatile organic compounds in accordance with EPA method 8260, respectively.

TRPH was detected at 1,840 mg/kg in Sample 1A and 112 mg/kg in Sample 1B.

Tetrachloroethylene (PCE) was detected at 422,000 µg/kg in Sample 1A and 1,470 µg/kg in Sample 1B. 1,1,Dichloroethane (1,1 DCA) was detected at 228 µg/kg in Sample 1B and was not detected, at a detection limit of 25,000 µg/kg, in Sample 1A. The remaining VOC were not detected in either of the two soil samples.

The results of the VOC laboratory analysis are summarized in Table 1. The complete laboratory report, quality assurance/control data, and chain-of-custody forms are attached in Appendix F.

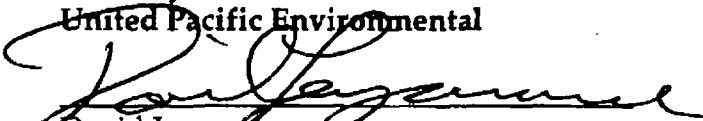
United Pacific Environmental was contracted to remove the underground storage tank, obtaining tank removal soil samples, and prepare this report. Any additional questions regarding hazardous materials use, treatment, or disposal at the facility should be directed to Earl's Manufacturing Company, Inc.

Our professional services were performed using that degree of care and skill ordinarily exercised by environmental consultants practicing in this or similar localities. The findings were mainly based upon analytical results provided by an independent laboratory. Evaluations of the environmental conditions at the site for the purpose of this investigation are made from a limited number of available data points (i.e. soil samples) and subsurface conditions may vary away from these data points. No other warranty, expressed or implied, is made as to the professional recommendations contained in this report.

Please feel free to call our office if you have any questions.

Sincerely,

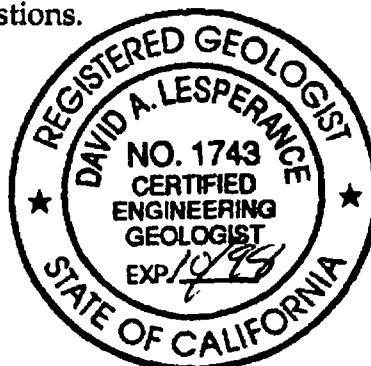
United Pacific Environmental


David Lesperance

Certified Engineering Geologist

Enclosure

cc: Brenda Nelson, SFSFD
County of Los Angeles, DPW
Ms. Claudette Earl, Earl's Manufacturing
Natasha M. Meskal, Ecotek Technology Solutions



Attachments

Table 1	Volatile Organic Analysis
Table 2	Metal Analysis
Table 3	Hydrocarbon Range
Figure 1	Site Location Map
Figure 2	Site Layout Map
Appendix A	Trim Sol MSDS
Appendix B	Tank Removal Permits
Appendix C	Tank Sample Laboratory Report
Appendix D	Sludge and Tank Rinsate Manifest
Appendix E	Tank Destruction Certificate
Appendix F	Tank Removal Soil Sample Laboratory Report

TABLE 1
VOLATILE ORGANIC COMPOUND ANALYSIS
EARLS MANUFACTURING

ANALYTE	TANK	1A	1B
Acetone	Not analyzed	Not analyzed	Not Analyzed
Acrolein	Not analyzed	Not analyzed	Not Analyzed
Acrylonitrile	Not analyzed	Not analyzed	Not Analyzed
Bromochloromethane	---	ND (25,000)	ND (100)
n-Butylbenzene	1,540 µg/kg	ND (25,000)	ND (100)
sec-Butylbenzene	1,070 µg/kg	ND (25,000)	ND (100)
tert-Butylbenzene	ND (1000)	ND (25,000)	ND (100)
2-Chloroethylvinyl ether	---	Not analyzed	Not Analyzed
2-Chlorotoluene	ND (1000)	ND (25,000)	ND (100)
4-Chlorotoluene	ND (1000)	ND (25,000)	ND (100)
1,2-Dibromo-3-chloropropane	ND (1000)	---	---
Dichlorodifluoromethane (Freon 12)	ND (1000)	ND (25,000)	ND (100)
cis-1,2-Dichloroethylene	6,070 µg/kg	ND (25,000)	ND (100)
1,3-Dichloropropane	ND (1000)	ND (25,000)	ND (100)
2,2-Dichloropropane	ND (1000)	ND (25,000)	ND (100)
1,1-Dichloropropylene	ND (1000)	ND (25,000)	ND (100)
Ethylene Dibromide (EDB)	ND (1000)	ND (25,000)	ND (100)
Hexachlorobutadiene	ND (1000)	ND (25,000)	ND (100)
Isopropylbenzene	1,890 µg/kg	ND (25,000)	ND (100)
p-Isopropyltoluene	1,470 µg/kg	ND (25,000)	ND (100)
Methyl Ethyl Ketone	---	ND (25,000)	ND (100)
Methyl Isobutyl Ketone	---	ND (25,000)	ND (100)
Naphthalene	5,860 µg/kg	ND (25,000)	ND (100)
n-Propylbenzene	4,640 µg/kg	ND (25,000)	ND (100)
Styrene	ND (1000)	ND (25,000)	ND (100)
1,2,3-Trichlorobenzene	ND (1000)	ND (25,000)	ND (100)
1,2,4-Trichlorobenzene	ND (1000)	ND (25,000)	ND (100)
1,2,4-Trimethylbenzene	27,500 µg/kg	ND (25,000)	ND (100)
1,3,5-Trimethylbenzene	18,100 µg/kg	ND (25,000)	ND (100)
1,1,2-Trichloro-trifluoroethane	---	Not analyzed	Not Analyzed

ND Not Detected at the level shown

TABLE 1
VOLATILE ORGANIC COMPOUND ANALYSIS
EARLS MANUFACTURING

ANALYTE	TANK	1A	1B
Bromobenzene	ND (1000)	ND (25,000)	ND (100)
Bromodichloromethane	ND (1000)	ND (25,000)	ND (100)
Bromoform	ND (1000)	ND (25,000)	ND (100)
Bromomethane	ND (1000)	ND (25,000)	ND (100)
Carbon Tetrachloride (Freon 10)	ND (1000)	ND (25,000)	ND (100)
Chloroethane	57,300 µg/kg	ND (25,000)	ND (100)
Chloroform	ND (1000)	ND (25,000)	ND (100)
1-Chlorohexane	---	Not analyzed	Not Analyzed
Chloromethane	4,210 µg/kg	ND (25,000)	ND (100)
Dibromochloromethane	ND (1000)	ND (25,000)	ND (100)
Dibromomethane	ND (1000)	ND (25,000)	ND (100)
Dichlorodifluoromethane (Freon 12)	ND (1000)	ND (25,000)	ND (100)
1,1-Dichloroethane (1,1-DCA)	8,240,000 µg/kg	ND (25,000)	228 µg/kg
1,2-Dichloroethane (1,2-DCA)	16,600 µg/kg	ND (25,000)	ND (100)
1,1-Dichloroethylene (1,1-DCE)	1,290 µg/kg	ND (25,000)	ND (100)
trans-1,2-Dichloroethylene	5,030 µg/kg	ND (25,000)	ND (100)
Dichloromethane (methylene chloride)	11,800 µg/kg	ND (75,000)	ND (300)
1,2-Dichloropropane	ND (1000)	ND (25,000)	ND (100)
cis-1,3-Dichloropropylene	---	ND (25,000)	ND (100)
trans-1,3-Dichloropropylene	---	ND (25,000)	ND (100)
1,1,1,2-Tetrachloroethane	ND (1000)	ND (25,000)	ND (100)
1,1,2,2-Tetrachloroethane	ND (1000)	ND (25,000)	ND (100)
Tetrachloroethylene (PCE)	7,180,000 µg/kg	422,000 µg/kg	1,470 µg/kg
1,1,1-Trichloroethane (111-TCA)	1,780,000 µg/kg	ND (25,000)	ND (100)
1,1,2-Trichloroethane (112-TCA)	ND (1000)	ND (25,000)	ND (100)
Trichloroethylene (TCE)	632,000 µg/kg	ND (25,000)	ND (100)
1,2,3-Trichloropropane	ND (2000)	ND (50,000)	ND (200)
Trichlorofluoromethane	ND (1000)	ND (25,000)	ND (100)
Vinyl chloride	6,650 µg/kg	ND (25,000)	ND (100)
Benzene	ND (1000)	ND (25,000)	ND (100)
Chlorobenzene	ND (1000)	ND (25,000)	ND (100)
1,2-Dichlorobenzene	ND (1000)	ND (25,000)	ND (100)
1,3-Dichlorobenzene	ND (1000)	ND (25,000)	ND (100)
1,4-Dichlorobenzene	ND (1000)	ND (25,000)	ND (100)
Ethyl benzene	10,800 µg/kg	ND (25,000)	ND (100)
Toluene	64,500 µg/kg	ND (25,000)	ND (100)
m, p-Xylene	---	ND (25,000)	ND (100)
o-Xylene	---	ND (25,000)	ND (100)
Total Xylene	48,500 µg/kg	---	---

ND Not Detected at the level shown

TABLE 2
PRIORITY METAL ANALYSIS
EARL'S MANUFACTURING

Antimony	2.6 mg/kg	500 mg/kg	15 mg/L	0.22-1.01 mg/kg
Arsenic	2.2 mg/kg	500 mg/kg	5 mg/L	2.8-0.9 mg/kg
Barium	139 mg/kg	10,000 mg/kg	100 mg/L	337-998 mg/kg
Beryllium	ND (0.05)	75 mg/kg	0.75 mg/L	0.30-1.56 mg/kg
Cadmium	3.2 mg/kg	100 mg/kg	1 mg/L	0.1-0.5 mg/kg
Chromium	89 mg/kg	2,500 mg/kg	560 mg/L	19-90 mg/kg
Cobalt	3.9 mg/kg	8,000 mg/kg	80 mg/L	3.6-14 mg/kg
Copper	905 mg/kg	2,500 mg/kg	25 mg/L	10-43 mg/kg
Lead	508 mg/kg	1,000 mg/kg	5 mg/L	9-31 mg/kg
Mercury	0.44 mg/kg	20 mg/kg	0.2 mg/L	0.02-0.11 mg/kg
Molybdenum	33 mg/kg	3,500 mg/kg	350 mg/L	0.39-1.85 mg/kg
Nickel	27 mg/kg	2,000 mg/kg	20 mg/L	7-32 mg/kg
Selenium	1.9 mg/kg	100 mg/kg	1 mg/L	0.09-0.56 mg/kg
Silver	0.56 mg/kg	500 mg/kg	5 mg/L	0.1-0.5 mg/kg
Thallium	2.9 mg/kg	700 mg/kg	7 mg/L	0.1-0.4 mg/kg
Vanadium	2.1 mg/kg	2,400 mg/kg	24 mg/L	36-136 mg/kg
Zinc	911 mg/kg	5,000 mg/kg	250 mg/L	31-98 mg/kg

ND Not Detected at the level shown

STLC Soluble Threshold Limit Concentration (mg/L)

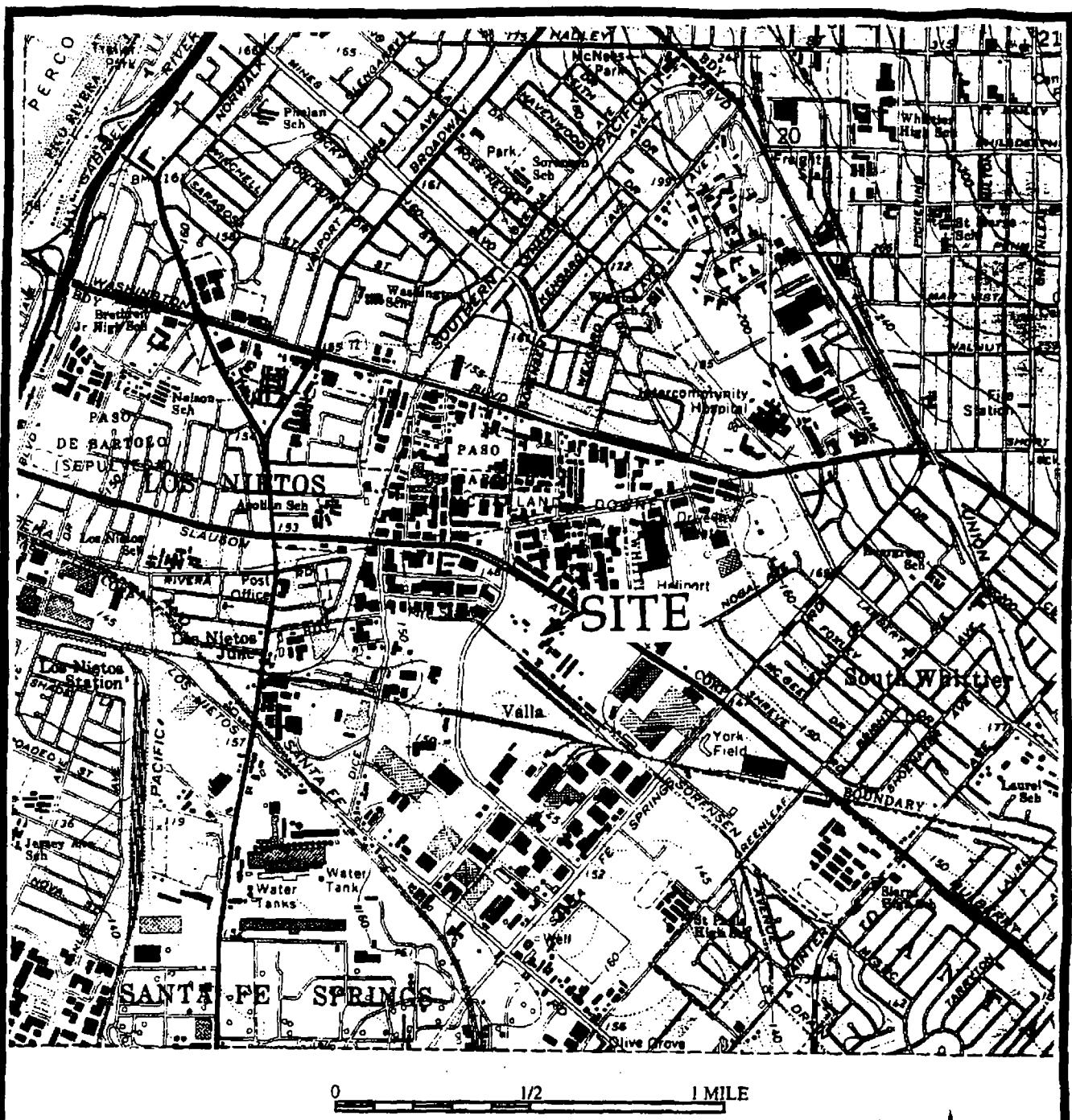
TTLC Total Threshold Limit Concentration (mg/kg)

Shacklette, H. T., and Boerngen, J. G.; 1984 Element Concentrations in Soils and other Surficial Materials of the Conterminous United States. U. S. Geo. Surv. Professional Paper 127, 105 pp

TABLE 3
HYDROCARBON RANGE
EARL'S MANUFACTURING

<C10	58,000 mg/kg	15
C10 to C12	53,500 mg/kg	14
C13 to C14	23,700 mg/kg	6.3
C15 to C16	9,300 mg/kg	2.5
C17 to C18	6,550 mg/kg	1.7
C19 to C20	11,300 mg/kg	3.0
C21 to C22	21,150 mg/kg	5.6
C23 to C24	23,650 mg/kg	6.2
C24 to C26	26,050 mg/kg	6.9
C27 to C28	38,550 mg/kg	10
C29 to C30	40,800 mg/kg	11
C31 to C32	29,050 mg/kg	7.7
C33 to C34	19,600 mg/kg	5.2
C35 to C36	9,850 mg/kg	2.6
C37 to C38	7,950 mg/kg	2.1
C39 to C40	ND	ND
TOTAL	379,000 mg/kg	99.8

ND Not Detected at the limits shown

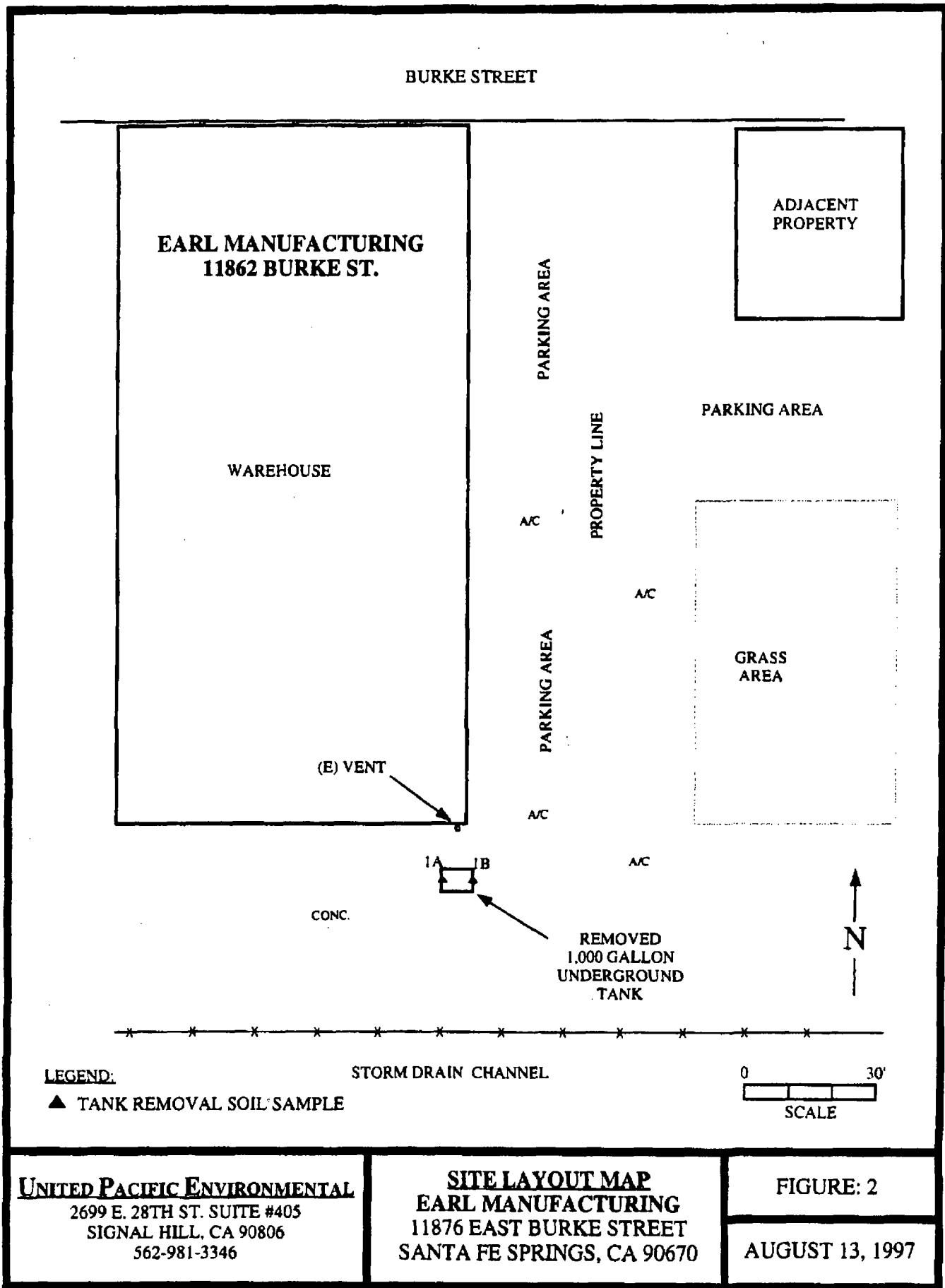


SITE LOCATION MAP
FROM: USGS 7.5 Minute Quadrangle

UNITED PACIFIC ENVIRONMENTAL
2699 E. 28TH ST. SUITE #405
SIGNAL HILL, CA 90806
(562) 981-3346

Earl's Manufacturing
11876 East Burke Street
Santa Fe Springs, CA 90670

FIGURE: 1



APPENDIX A
TRIM SOL MSDS


SC

<u>Post-It® Fax Note</u>	571	Date	10/22	Page	2
To	<u>SCOTT STRANG</u>	From	<u>NA-TASHA HERTEL</u>		
Co/Dept		To	<u>ECOTEK</u>		
Phone #		Phone #	(519) 636-8400 ext.		
Fax #	(310) 423-5306	Fax #			104

1. MATERIAL AND MANUFACTURER IDENTIFICATION

Product name: TRIMP SOL
 Material type: Water miscible cutting and grinding fluid concentrate
 Classification/synonym(s): Chemated emulsion/Soluble oil
 Product use: Coolant and lubricant in metal removal processes
 Manufacturer address: MASTER CHEMICAL CORPORATION
 601 West Boundary
 Perryburg, OH 43651-1263 *GSC*
 Emergency telephone: 419-874-7802 Fax number: 419-874-0884

2. REGULATORY INFORMATION

Department of Transportation: DOT Hazard Class: None
 TRIMP SOL is not classified as a hazardous material by DOT.
 Resource Conservation and Recovery Act: EPA Hazardous Waste Number(s): None
 TRIMP SOL is not classified as a hazardous waste by EPA.
 Toxic Substances Control Act: All TRIMP SOL Ingredients are listed on the TSCA Inventory of Chemical Substances.
 Superfund Amendments and Reauthorization Act of 1986: TRIMP SOL does not contain any Section 302/304 Extremely Hazardous Substances or Section 313 Toxic Chemicals.

3. INGREDIENT INFORMATION

COMPONENT	CODATA PEL	ACGIH TLV	OTHER UNITS RECOMMENDED	CAS #	% RANGE
petroleum oil	5 mg/m³ (mixed)	5 mg/m³ (mixed)	none	8002-06-9	30-40
petroleum sulfonate	none	none	none	61789-85-3	20-30
chlorinated alkene polymer	none	none	none	68410-99-1	20-30
nonionic surfactant	none	none	none	68901-48-0	1-10
aromatic alcohol	none	none	none	68803-15-6	1-10
propylene glycol ether	none	none	none	68803-15-6	1-10
propylene glycol	none	none	none	57-98-8	<1
substituted indole	none	none	none	63231-48-1	<1
blue-green dye	none	none	none	63231-48-1	<1
silicone defoamer	none	none	none	63146-82-9	<1
water	none	none	none	7732-18-5	balance

The exact chemical identities and percentages of the raw materials used in TRIMP SOL are trade secrets. This information is being withheld as provided for in the Occupational Safety and Health Administration's Hazard Communication Rule (29 CFR 1910.1200).

4. PHYSICAL DATA

Boiling point (at 760 mm Hg)	217°F (103°C)	Specific gravity (H ₂ O=1)	0.99
Vapor pressure (psi)	41	Percent volatiles by volume	8.48%
Vapor density (Air=1)	Not determined	Evaporation rate (butylacetate=1)	1
Solubility in water	100%	pH of concentrate	Not applicable
Appearance	Dark green viscous liquid with a mild, pleasant odor	pH of freshly mixed emulsion with deionized water at 5%	9.1
		Normal pH range for working solution	7.3-8.5

5. FIRE AND EXPLOSION HAZARD DATA

Flash point (test method)	300°F (152°C) (COC) None (TCC)	Flammable limits	Not determined
Extinguishing media	As appropriate for the surrounding fire; water (hood with water), dry chemical, CO ₂ or "alcohol" foam		
Special fire fighting procedures	None	Unusual fire and explosion hazards	None

6. HEALTH HAZARD DATA

Threshold limit value	None established by ACGIH or OSHA		
Acute effects of overexposure	Eye Contact Skin Contact Inhalation Ingestion Skin Absorption	Transient Irritation Possible irritant, nonirritant, nonsensitizer Nonirritant Nonirritant Nonirritant	
Chronic effects of overexposure	None currently known		
Product/ingrediente listed as carcinogen or potential carcinogen?	NTP Annual Report No IARC Monographs No OSHA No		
Signs and symptoms of exposure	None		
Medical conditions generally aggravated by exposure	None known		
Emergency and first aid procedures	Eye Skin Inhalation Ingestion	Flush immediately with cool, clean water for at least 15 minutes Wash with mild soap and warm water Remove to fresh air If large quantities are ingested, contact a physician In every case get medical attention as required	

7. REACTIVITY DATA

Stability	Stable	Conditions to avoid	None
Incompatibility (materials to avoid)	Strong oxidizers, acids and alkalies		
Hazardous combustion or decomposition products	Thermal decomposition (fire) may produce CO, CO ₂ , HCl, SO ₂		
Hazardous polymerization	Will not occur	Conditions to avoid	None

8. SPILL OR LEAK PROCEDURES

Steps to be taken if material is released or spilled	Mop up or use dry absorbent
Waste disposal method	Chemical treatment Refer to Data and Information Sheet for suggested procedure

9. SPECIAL PROTECTION INFORMATION

Respiratory protection (Specify type)	None		
Ventilation	Local exhaust Mechanical (general) Special Other	Not normally required General room ventilation should be sufficient	
Protective gloves	None	None	None
Other protective equipment	None		
Eye protection	Safety glasses		

10. SPECIAL PRECAUTIONS

Precautions to be taken in handling and storing	Refer to Data and Information Sheet or container labels
Other precautions	None
Date of preparation	October, 1996

TRIMF is a registered trademark

The information herein is given in good faith and believed cut-

APPENDIX B

TANK REMOVAL PERMITS

APPLICATION FOR CLOSURE
 HAZARDOUS MATERIALS UNDERGROUND STORAGE
 COUNTY OF LOS ANGELES-DEPARTMENT OF PUBLIC WORKS
 WASTE MANAGEMENT DIVISION
 900 S. FREMONT AVENUE
 ALHAMBRA, CALIFORNIA 91803-1331

Permit	187029*
F#	14977-15839 1H R/C
Fee	\$232
Check [x]	Cash []

OWNER: Name EARL MANUFACTURING CO.Mailing Address 11876 EAST BURKE ST City SANTA FE SPRINGS State CA Zip 90670

Phone _____

FACILITY:

Occupant Name	Phone
Site Address	City SANTA FE SPRINGS
Mailing Address	City _____
Contact Person	State ZIP
ME. CLAUDETTE EARL	Title OWNER

CONTRACTOR (X), complete below:

Name	Phone
WEGENER CONSTRUCTION	805-378-4566
State License No.	Class
413973	A + HAZ

CLOSURE REQUESTED:

- PERMANENT, TANK REMOVAL (See Conditions A and C Attached)
 How many underground tanks will remain after this closure? 0
- PERMANENT, CLOSURE IN PLACE (See Conditions A and D Attached)
- TEMPORARY (See Conditions A and B Attached)

TANK DESCRIPTION:		PLOT PLAN ATTACHED (X)		EXISTING HMSP NO. _____	
Tank No.	Tank Mat'l	Age	Capacity	Materials Stored (Past/Present)	
#1	STEEL	20YRS+	1,000 GPC	TRIN SOL (MSDS ATTACHED)	

COMPLETE THE FOLLOWING:

- Has an unauthorized release ever occurred at this site? YES NO
- Have structural repairs ever been made to these tanks? YES NO
- Will new underground tanks be installed after closure? YES NO
- Will any wells, including monitoring-wells, be abandoned? YES NO

NOTICE: CONTAMINATED TANKS AND RESIDUES THAT MAY BE LEFT IN TANKS TO BE CLOSED MAY BE A HAZARDOUS WASTE WHICH MUST BE TRANSPORTED AND DISPOSED OF PURSUANT TO CHAPTER 6.5, CALIFORNIA HEALTH & SAFETY CODE. FAILURE TO COMPLY MAY BE PROSECUTED AS A FELONY VIOLATION.

By signature below the applicant certifies that all statements and disclosures above are true and correct and that they have read and agree to abide by this permit and all conditions and limitations attached.

Applicant's Signature HARRY W. STONE
 (Print Name) HARRY W. STONE

Date 3-20-97
 Phone (805) 396-7566

Owner [] Operator [] Contractor (X)

TO BE COMPLETED BY THE DEPARTMENT OF PUBLIC WORKS
 PURSUANT TO SECTION 11.80.070B, LOS ANGELES COUNTY CODE. PERMISSION IS HEREBY GRANTED TO PROCEED WITH THE CLOSURE DESCRIBED ABOVE SUBJECT TO THE ATTACHED CONDITIONS AND LIMITATIONS (X). THIS PERMIT EXPIRES 180 DAYS FROM THE DATE BELOW.

HARRY W. STONE
 Director of Public Works

By Jeffrey Date 3-20-97

CLOSURE -- UNDERGROUND STORAGE TANKS

CONDITIONS A -- GENERAL

1. Closures shall be carried out such that all applicable regulations from the following agencies are complied with: Los Angeles County, Department of County Engineer - Facilities; Los Angeles County Fire Department, Fire Prevention Division or the appropriate city Fire Department; South Coast Air Quality Management District; and Los Angeles County Department of Health Services.
2. The County Engineer and Fire Departments shall be notified in advance of any closure in accordance with the following:
 - a. Removal of tank shall require a three (3) business day advance notification.
 - b. Permanent closure of a tank in place or a temporary closure shall require a 30 day written notification.
3. Consult current fee schedule for costs.
4. All abandoned wells shall be destroyed in such a way that they will not produce water or act as a channel for interchange of water, when such interchange may result in deterioration of the quality of water in any or all water bearing formations penetrated, or present a hazard to the safety and well-being of people and animals.
5. A well destruction permit issued by the Los Angeles Department of Health Services shall be required for all wells requiring a permit for their initial construction.
6. Well destruction shall be accomplished according to methods described in the latest "Water Well Standards" State of California" by the Department of Water Resources, contained in Bulletin 74-81, December 1981, or any other methods that will provide equivalent or better protection.
7. Plans for the decontamination of a facility shall be submitted to the County Engineer for approval no later than 10 days before the commencement of such operations. Other agencies having jurisdiction shall also be notified. These agencies include the California Regional Water Quality Board, the Los Angeles County Department of Health Services, and the South Coast Air Quality Management District.
8. Decontamination shall require the following, as a minimum:
 - a. Cleaning operation shall be done under the supervision of persons who understand the hazardous potential of the original liquid stored and its components.
 - b. The personnel shall be sufficiently skilled to safely carry out such operation.
 - c. Contaminated materials removed from such facility shall be disposed of at legal point of discharge.
 - d. The operation shall be carried out in a manner that will not endanger the health of the public and the environment.

CONDITIONS B -- TEMPORARY

1. All temporary closures shall be carried out as indicated in Los Angeles County Fire Department, Fire Prevention Division, Supplement FA -- Inspection Guide #6, "Abandonment or Removal of Underground Storage Tanks" Part 6 and any other applicable Parts.

CONDITIONS C -- PERMANENT TANK(S) REMOVAL

1. All tank removals shall be carried out as indicated in Los Angeles County Fire Department, Fire Prevention Division, Supplement FA -- Inspection Guide #6, Part 6 and any other applicable Parts.
 2. Owners/operators shall notify the Building Department having jurisdiction at the place of removal if a grading permit is necessary.
 3. Removed tanks shall not be transported away from the site until an inspection to establish site integrity is carried by the County Engineer.
 4. If an appointment has been arranged with a County Engineer Inspector to inspect the removal of a tank, the inspector will only wait at the site a reasonable amount of time (approximately one hour) after arriving for the removal to commence. Another closure fee may be charged if the inspector has to return to the site.
 5. After inspection, tanks shall be transported to a legal disposal point.
 6. If the tank has stored materials other than motor fuel, fuel oil or waste oil, site integrity shall be demonstrated using the soil sampling and analysis procedures described in conditions D below.
 7. The site shall be backfilled and recompacted to a relative compaction of 95%.
- CONDITIONS D -- PERMANENT
1. All permanent closures of tanks in place shall comply with Los Angeles County Fire Department, Fire Prevention Division, Supplement FA -- Inspection Guide #6, Parts B or C, and any other applicable Parts.
 2. Owners/operators shall demonstrate part site integrity as follows:
 - a. Test borings shall be cased drilled to intercept a point beneath the center of the tank, if possible. If cased drilling is not feasible, the test borings may be drilled vertically and the reason stated in the report in 1.b. below.
 - b. For single tanks, a minimum of two test borings will be required, each located on opposite sides of the tank along the major axis of the tank.
 - c. For multiple tanks, as a minimum, borings shall be placed at 20 foot intervals around the tank cluster. The actual number and location of borings shall be evaluated on a case-by-case basis. Tanks separated by 20 feet or more shall be considered single tanks for the purposes of test location and placement.
 - d. Soil samples shall be taken at depths of 8, 16, 24, 32 and 40 feet below grade level.
 - e. A Shelby Tube or a Modified California Sampler shall be utilized for taking soil samples.
 - f. Soil samples shall be capped immediately with teflon or silicones.
 - g. Soil samples shall not be extracted in the field but are to be immediately placed in a refrigerated ice chest and transported to a state certified laboratory for analysis, using suitable methods.
 - h. A report containing the results of the above analysis shall be submitted to the County Engineer.
 3. If the soil analysis in 2. above indicates the presence of contaminants, the County Engineer shall require a site investigation as described in Chapter V of the County's "Underground Storage of Hazardous Materials -- Guidelines."

NOTICE TO CLOSURE PERMIT APPLICANTS

The South Coast Air Quality Management District (SCAQMD) has adopted Rule 1166 regulating emissions of Volatile Organic Compounds (VOC) from decontamination of soil effective August 6, 1988.

In addition to the requirements of your Closure Permit, persons excavating any underground storage tank that previously contained VOC's must:

- Notify the SCAQMD Executive Officer by telephone at (310) 403-6000 24 hours prior to tank excavation. 1166(e)(1)(A)
- Monitor the excavated material during the excavation for VOC contamination. 1166(e)(1)(B)
- When VOC contamination is detected:
 - * Cease excavation
 - * Cover the contaminated soil until implementation of approved mitigation measures. 1166(e)(1)(C)
 - * Notify the SCAQMD Executive Officer at (714) 396-2000 within 24 hours of detection of VOC contaminated soil. 1166(e)(2)(A)
- A person shall not engage in or allow any on-site or off-site spreading of VOC contaminated soil which results in uncontrolled evaporation of VOC to the atmosphere. 1166(e)(3)

Exemptions

- Treatment of less than one (1) cubic yard of contaminated soil. 1166(e)(1)(A)
- Decontamination of soil containing organic compounds that have initial boiling point of 302°F or greater, Reid Vapor Pressure less than 80mm Hg or Absolute Vapor Pressure less than 36mm Hg at 20°C. 1166(e)(1)(B), (F)
- Removal of soil for sampling purposes pursuant to EPA methods. 1166(e)(1)(C)
- Accidental spillage of five (5) gallons or less of VOC. 1166(e)(1)(D)
- Documentation of soil which is contaminated through natural seepage of VOC from oil and gas wells or other natural sources. 1166(e)(1)(E)

SPECIFIC QUESTIONS ON RULE 1166 SHOULD BE REFERRED TO THE
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (909) 396-2000

BURKE STREET

EARL MANUFACTURING
11862 BURKE ST.

WAREHOUSE

(E) VENT

CONC.



PARKING AREA

PROPERTY LINE

A/C

A/C

A/C

GRASS
AREA

PARKING AREA

0

30'

SCALE



STORM DRAIN CHANNEL

UNITED PACIFIC ENVIRONMENTAL
2699 E. 28TH ST. SUITE #405
SIGNAL HILL, CA 90806
310-981-3346

SITE LAYOUT MAP
EARL MANUFACTURING
11876 EAST BURKE STREET
SANTA FE SPRINGS, CA 90670

FIGURE:

JANUARY 1997

**CLOSURE PERMIT SUPPLEMENT
HAZARDOUS MATERIALS UNDERGROUND STORAGE
LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT DIVISION
900 S. FREMONT AVENUE
ALHAMBRA, CA 91803**

Closure Permit
No.: 187029
File No.
S-14977-15839

PART 1 OF 2

To satisfy the permanent closure requirements for underground storage tanks previously storing hazardous materials, site integrity must be demonstrated by the analysis of soil samples and, if applicable, groundwater samples as outlined below. These requirements are in addition to the conditions listed on the Application for Closure or contained in an approved Closure Plan.

1. Samples shall be obtained at the sampling points (SP) indicated on the attached plot plan.
 2. For each SP, samples shall be obtained at the following depths:

CLOSURE PERMIT SUPPLEMENT

PART 2 OF 2

3. All soil samples obtained shall be discrete, undisturbed and unexposed prior to analysis. The method used to obtain the samples and the date of sampling shall be included in the final report.
4. If groundwater is encountered during sampling, a groundwater monitoring well shall be established at the most downgradient sampling point. The well shall be developed by removing a minimum of four well volumes and a groundwater sample shall be obtained and analyzed.
5. The analytical results for all soil samples shall be expressed milligrams per kilogram (mg/kg), or micrograms per kilogram (ug/kg) as appropriate. Practical quantitation limits of 5-10 ug/kg (ppb) for volatile organics and 1 mg/kg (ppm) for the petroleum hydrocarbons must be achieved by the laboratory. Analytical results for groundwater samples shall be expressed in ug/l (ppb) and practical quantitation limits of .5-5 ug/l (ppb) for volatile organics, and 1 mg/l (ppm) for petroleum hydrocarbons must be achieved by the laboratory.
6. Analytical results shall be reported on laboratory letterhead and shall include the following information: a) The date the analysis was conducted; b) The method of extraction (if applicable); c) Detection limits for each analytical procedure and determination; d) The method of analysis; e) Signature of chemist certifying results.
7. All soil/groundwater samples obtained shall be handled and transported to laboratory in strict accordance with applicable EPA regulations utilizing chain-of-custody procedures. Chain-of-custody documentation shall be included in the final report.
8. If the soil/groundwater analysis indicates undefined contamination at the facility, additional sampling shall be required to define the vertical and lateral extent present.
9. A final report that contains all of the above required information shall be submitted to the office above within one (1) month from the sampling date or 180 days from the date of this permit, whichever is earlier.

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT DIVISION

CLOSURE REPORT REQUIREMENTS

A closure report shall be submitted to the County of Los Angeles Department of Public Works, Waste Management Division, P.O. Box 1460, Alhambra, California 91802-1460, containing:

1. File number of facility and closure permit number.
2. Plot plan to scale showing locations of tanks, sampling points, buildings, adjacent streets, and north arrow.
3. Description of methods for obtaining, handling, and transporting samples.
4. Time and date samples were obtained.
5. Soil sampling certification (including but not limited to soils classification, boring logs, sample procedures, sample locations, initiating chain-of-custody, and groundwater location) for UST closure shall be certified by a California registered geologist, a California certified engineering geologist, or a California registered civil engineer with sufficient experience in soils. The certification must clearly state that all work was performed under the supervision of the person signing.
6. Chain-of-custody documentation initiated by person obtaining sample through person at CAL/EPA Department of Toxic Substance Control certified laboratory.
7. Disposal destination of tanks and evidence of legal disposal.
8. Analysis results by a State certified laboratory submitted on laboratory letterhead showing analysis date, methods of extraction, and methods of analysis.
9. Documentation as to depth of groundwater at facility.
10. Manifests to document hazardous waste disposal of any removed soil and tank rinseate.
11. Any observations of site contamination.
12. Remedial action plan to mitigate contamination.
13. Report to be signed by a California registered geologist, a California certified engineering geologist, or a California registered civil engineer with sufficient experience in soils.

Print Name SCOTT STEWART

Signature [Signature]

Date 3/20/97

ATTENTION CONTRACTOR

NOTIFICATION/PERMIT REQUIREMENTS

This Closure Authorization is issued subject to compliance with all applicable laws and regulations relating to the performance of work including, but not limited to, business license requirements, Building Codes, Fire Codes, Air Quality regulations, Health and Safety Codes, Water Codes, and Transportation regulations.

Pursuant to Los Angeles County Code, Section 11.78.045, and the Conditions and Limitations of the attached Hazardous Materials Underground Storage Closure Authorization, you are required to complete ALL of the agency notifications indicated below within the time period specified prior to commencement of work on this closure.

[X] 72 HOURS - DEPARTMENT OF PUBLIC WORKS INDUSTRIAL WASTE ENGINEERING INSPECTOR:

>>>Unless otherwise noted DPW inspectors are available at the following offices, Monday through Friday, between 8:00 a.m. and 9:30 a.m. ONLY.<<<

[X] BELLFLOWER AREA - (310) 804-2584
16600 Civic Center Dr., Suite 200, Bellflower, CA 90607

[] CENTINELA VALLEY AREA - (310) 534-4862 or 534-4859
24320 S. Narbonne Ave., Lomita, CA 90717

[] LENNOX AREA - (310) 534-4862 or 534-4859
24320 S. Narbonne Ave., Lomita, CA 90717

[] SAN GABRIEL VALLEY AREA - (818) 574-0962
125 S. Baldwin Ave., Arcadia, CA 91007

[] SAN DIMAS AREA - M, W, & F - (818) 574-0961 or T & TH - (818) 961-9611
125 S. Baldwin Ave., Arcadia, CA 91007

[] EAST LOS ANGELES AREA - (213) 260-3466
5119 E. Beverly Blvd., Los Angeles, CA 90022

[] NEWHALL AREA - (805) 253-7207
23757 W. Valencia Blvd., Santa Clarita, CA 91355

[X] 48 HOURS (OR AS REQUIRED) - LOCAL FIRE DEPARTMENT FIRE PREVENTION INSPECTOR:

[X] City of Santa Fe Springs F.D. (310) 868-0511

[] Los Angeles County Fire Department

[X] 24 HOURS - SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

(909) 396-2000

[X] COUNTY SERVES AS BUILDING OFFICIAL, SEE ATTACHED.

FAILURE TO PROVIDE NOTICE AS REQUIRED ABOVE MAY RESULT IN PERMIT REVOCATION, ADDITIONAL SITE ASSESSMENT REQUIREMENTS, AND/OR ADMINISTRATIVE PENALTIES AS PROVIDED BY LAW.

**DIRECTORY OF LOS ANGELES COUNTY
BUILDING & SAFETY DIVISION OFFICES**



Unless specifically indicated, all offices are open 8:00 a.m. to 4:30 p.m., Monday through Friday except legal holidays*.

CENTRAL OFFICE

(Mon.-Thurs. 7:00 a.m. - 5:00 p.m., Closed Friday)

900 South Fremont Ave., 3rd Floor, Alhambra, CA 91803
Building Section — (818) 458-3173, FAX (818) 458-2961
Electrical Section — (818) 458-3180
Mechanical Section — (818) 458-3182

DISTRICT OFFICES

8 Antelope Valley #6-499
 335A East Ave. K-6
 Lancaster, CA 93535
 (805) 723-4440 FAX (805) 723-4435

4 Bellflower (Closed 12-1) #6-248
 16600 Civic Center Drive, Suite 200
 Bellflower, CA 90706
 (310) 804-2588, FAX (310) 920-2125

9.1 Calabasas/Mallibu #6-661
 4111 N. Las Virgenes Road
 Calabasas, CA 91302
 (818) 880-4150, FAX (818) 880-6279

13 Carson (M-Th, 7-6) #6-242
 (Closed FRIDAY)
 701 E Carson Street
 Carson, CA 90745
 (310) 830-7600, FAX (310) 513-6243

6 East Los Angeles #6-027
 5119 E. Beverly Blvd
 Los Angeles, CA 90022
 (213) 260-3450, FAX (213) 267-4422

1 Firestone (Closed 1-2) #6-128
 7807 S. Compton Avenue
 Los Angeles, CA 90001
 (213) 586-8541, FAX (213) 586-8526

CITY OFFICES

4.08 Artesia (8-9) #6-261
 18747 Clarkdale Avenue
 Artesia, CA 90701
 (310) 865-6263 FAX (310) 865-6240

4.07 Bellflower (Closed 12-1) #6-249
 16600 Civic Center Way, Suite 200
 Bellflower, CA 90706
 (310) 804-2588 FAX (310) 920-2125

5.01 Bradbury (Tu, F 1-2) #6-578
 600 Winston Street
 Bradbury, CA 91010
 (818) 358-3218, FAX (818) 303-5154

12.05 Carson (11-12, 7-6) #6-242
 (Closed FRIDAY)
 701 E Carson Street
 Carson, CA 90745
 (310) 830-7600 FAX (310) 513-6243

4.02 Cerritos (8-5) #6-258
 18125 Bloomfield Avenue
 Cerritos, CA 90701
 (310) 860-0311, FAX (310) 865-1944

6.01 Commerce #6-180
 2535 Commerce Way
 Commerce, CA 90040
 (213) 887-4455, FAX (213) 888-6841

5.09 Duarte (M-Th, 7:30-5:30) #6-139
 1600 Huntington Drive
 Duarte, CA 91010
 (818) 357-7931, FAX (818) 358-0018

4.03 Hawaiian Gardens #6-072
 21815 Pioneer Blvd.
 Hawaiian Gardens, CA 90716
 (213) 420-2641, FAX (310) 496-3708

2.03 Industry #6-688
 16005 E. Central Avenue
 La Puente, CA 91744
 (818) 961-9611, FAX (818) 961-8166

5.06 Irwindale (8-11:30) #6-687
 5050 N. Irwindale Avenue
 Irwindale, CA 91706
 (818) 962-3381, FAX (818) 962-4209

3.01 La Canada Flintridge #6-637
 (8-11:15)
 1327 Foothill Blvd
 La Canada Flintridge, CA 91011
 (818) 790-8651, FAX (818) 790-7536

4.01 Lakewood (8-5:15) #6-234
 5050 N. Clark Avenue
 Lakewood, CA 90712
 (310) 866-9771, (310) 866-0505

4.08 La Mirada (8-10) #6-287
 13700 S. La Mirada Blvd
 La Mirada, CA 90638
 (310) 943-0131, FAX (310) 943-1164

2.02 La Puente #6-686
 16005 E. Central Avenue
 La Puente, CA 91744
 (818) 961-9611, FAX (818) 961-8166

7.01 Lawndale (8-10) #6-231
 14717 S. Burnt Avenue
 Lawndale, CA 90260
 (310) 970-2136, FAX (310) 644-4556

12.04 Lomita #6-110
 24320 S. Narbonne Avenue
 Lomita, CA 90717
 (310) 534-3760, FAX (310) 530-5482

12.02 Rolling Hills #6-110
 24320 S. Narbonne Avenue
 Rolling Hills, CA 90717
 (310) 534-3760, FAX (310) 530-5482

12.03 Rolling Hills Est. #6-110
 24320 S. Narbonne Avenue
 Rolling Hills, CA 90717
 (310) 534-3760, FAX (310) 530-5482

4.05 Santa Fe Springs #6-262
 11710 E. Telegraph Road
 Santa Fe Springs, CA 90670
 (310) 888-0511, FAX (310) 868-7111

5.08 Temple City (8-12) #6-038
 9701 Las Tunas Drive
 Temple City, CA 91780
 (818) 285-0488, FAX (818) 285-8192

9.02 Westlake Village #6-661
 4111 N. Las Virgenes Road
 Calabasas, CA 91302
 (818) 880-4150, FAX (818) 880-6279

* Inspectors' office hours are 8-9 daily.
 - Request Friday inspections on Thurs.



CITY OF SANTA FE SPRINGS

FIRE DEPARTMENT

FIRE ENVIRONMENTAL PROTECTION BUREAU

11300 GREENSTONE AVE., SANTA FE SPRINGS, CA 90670

(310) 944-9713 • FAX (310) 941-1817

PLAN REVIEW/FIELD INSPECTION/SPECIAL ACTIVITIES APPLICATION

Name of Facility EARL MANUFACTURING
 Project Address 11876 E. BURKE ST. Unit #
 Architect/Engineer UNITED PACIFIC ENVIROTECH Telephone 562-981-3316
 Address 2699 E. 28TH ST. #405 SIGNAL HILL CA 90806
 Contractor WERNER CONST. telephone (805) 390-9516
 Address 6901-B MCDIVITT STREET SAN JUAN CAYUCOS CA 93435

DESCRIPTION OF WORK	
REMOVE 1 1000 GALLON U/G TANK SOL TANK	

LICENSED CONTRACTOR DECLARATION:
 I hereby affirm that I am licensed under provisions of Charter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

License Class A License No. 413913

Signature David W. Kline Date 3-20-97

OWNER BUILDER DECLARATION

I hereby certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to construction, and hereby authorize representatives of this city to enter upon the above mentioned property for inspection purposes.

Signature _____ Date _____ City License _____

(v)	DESCRIPTION	FEE	(v)	DESCRIPTION	FEE
PLAN REVIEW AND FIELD INSPECTIONS			sq. ft. per floor		
	Preliminary Plan Review			Tents and Air Support Structure	
	3 or more Plan Re-Submittal			Tenant Improvements (Structural/Auto Sprinklers)	
	Fire Alarm System			Soil Venting Systems	
	Fire Extinguishing System			Gas Detection System	
FIRE SPRINKLER SYSTEMS			SPECIAL ACTIVITIES AND EVENTS -- ONE TIME PERMITS		
	sq. ft. per floor			A/G & U/G TANK REMOVAL	
	Underground Fire Mains/Pumps/Tanks			a. First Tank	
	"H" Occupancy			b. Each Additional Tank	
	Compressed Gas System			Abandonment/Reabandonment of Oil Wells (Including Capping)	
	Hazardous Material Tank (U/G & A/G)			Monitoring Wells	
	Flammable/Combustible Liquid Tank (U/G & A/G)			Standby Fire Watch	
	Flammable/Combustible Liquid Piping or Repiping System(s)			Fire Department Equipment With Crew	
	L.P.G. Tanks			Request Inspection	
	Paint Spray Booths/Dip Tank			Risk Management Prevention Program (RMPP), Requests for site information, Hazardous Material Business Plan Review	
	Dust Collection System			Chemical Hazard Classification & Occupancy Rating U.F.C./U.B.C. Tables Review	
NEW CONSTRUCTION PLAN REVIEW			Carnival & Fairs		
	sq. ft. per floor			Other	
	On-site Fire Hydrant System				
	Drying Ovens				
	High-Piled Combustible Stock (Racks/Drafts Curtains/Hose Racks/Smoke Vents)				

TOTAL DUE

210.1

3/20/97

DATE

INSPECTOR

MAKE CHECKS PAYABLE TO THE CITY OF SANTA FE SPRINGS

CUSTOMER COPY

APPENDIX C
LABORATORY REPORT
TANK SAMPLE

**Advanced Technology
Laboratories**

July 22, 1997

ELAP No.: 1838

United Pacific Environmental
2699 E. 28th St., Suite 405
Signal Hill, CA 90806

ATTN: Mr. David Lesperance

Client's Project: Earl Manufacturing
Lab No.: 19075-001

Gentlemen:

Enclosed are the results for sample(s) received by Advanced Technology Laboratories and tested for the parameters indicated in the enclosed chain of custody.

Thank you for the opportunity to service the needs of your company. Please feel free to call me at (310) 989 - 4045 if I can be of further assistance to your company.

Sincerely,


Edgar P. Caballero
Laboratory Director
EPC/ms

Enclosures

This cover letter is an integral part of this analytical report.

This report pertains only to the samples investigated and does not necessarily apply to other apparently identical or similar materials. This report is submitted for the exclusive use of the client to whom it is addressed. Any reproduction of this report or use of this Laboratory's name for advertising or publicity purposes without authorization is prohibited.

Client: United Pacific Environmental
Attn: Mr. David Lesperance

Pg. 1 of 2

Client's Project: Earl Manufacturing
Date Received: 07/18/97
Matrix: Sludge
Units: ug/kg
Date Amended: 07/23/97

EPA Method 8260

Lab No.:	Method Blank	19075-001				
Client Sample I.D.:	--	Tank				
Date Sampled:	--	07/18/97				
QC Batch #:	Q97VOCS173	Q97VOCS173				
Date Analyzed:	07/22/97	07/22/97				
Analyst Initials:	YP	YP				
Dilution Factor:	1	200				
ANALYTE	MD	DLR	Results	DLR	Results	
Benzene	5	5	ND	1000	ND	
Bromobenzene	5	5	ND	1000	ND	
Bromodichloromethane	5	5	ND	1000	ND	
Bromoform	5	5	ND	1000	ND	
Bromomethane	5	5	ND	1000	ND	
n-Butylbenzene	5	5	ND	1000	1540	
sec-Butylbenzene	5	5	ND	1000	1070	
tert-Butylbenzene	5	5	ND	1000	ND	
Carbon tetrachloride	5	5	ND	1000	ND	
Chlorobenzene	5	5	ND	1000	ND	
Chloroethane	5	5	ND	1000	57300	
Chloroform	5	5	ND	1000	ND	
Chloromethane	5	5	ND	1000	4210	
2-Chlorotoluene	5	5	ND	1000	ND	
4-Chlorotoluene	5	5	ND	1000	ND	
Dibromochloromethane	5	5	ND	1000	ND	
1,2-Dibromo-3-chloroprop	10	10	ND	2000	ND	
1,2-Dibromoethane	5	5	ND	1000	ND	
Dibromomethane	5	5	ND	1000	ND	
1,2-Dichlorobenzene	5	5	ND	1000	ND	
1,3-Dichlorobenzene	5	5	ND	1000	ND	
1,4-Dichlorobenzene	5	5	ND	1000	ND	
Dichlorodifluoromethane	5	5	ND	1000	ND	
1,1-Dichloroethane	5	5	ND	1000	8240000*	
1,2-Dichloroethane	5	5	ND	1000	16600	
1,1-Dichloroethene	5	5	ND	1000	1290	
cis-1,2-Dichloroethene	5	5	ND	1000	6070	

MDL = Method Detection Limit

* Dilution factor = 20,000.

ND = Not Detected (Below DLR).

DLR = MDL X Dilution Factor

NA = Not Analyzed

Reviewed/Approved By:


Lee Ingvaldsen
Department Supervisor

Date 7/23/97

The cover letter is an integral part of this analytical report.

Client: United Pacific Environmental
Attn: Mr. David Lesperance

Pg. 2 of 2

Client's Project: Earl Manufacturing
Date Received: 0/18/97
Matrix: Sludge
Units: ug/kg
Date Amended: 07/23/97

EPA Method 8260

Lab No.:	Method Blank		19075-001					
Client Sample I.D.:	-		Tank					
ANALYTE	MD	DLR	Results	DLR	Results			
trans-1,2-Dichloroethene	5	5	ND	1000	5030			
1,2-Dichloropropane	5	5	ND	1000	ND			
1,3-Dichloropropane	5	5	ND	1000	ND			
2,2-Dichloropropane	5	5	ND	1000	ND			
1,1-Dichloropropene	5	5	ND	1000	ND			
Ethylbenzene	5	5	ND	1000	10800			
Hexachlorobutadiene	5	5	ND	1000	ND			
Isopropylbenzene	5	5	ND	1000	1890			
p-Isopropyltoluene	5	5	ND	1000	1470			
Methylene Chloride	15	15	ND	3000	11800			
Naphthalene	5	5	ND	1000	5860			
n-Propylbenzene	5	5	ND	1000	4640			
Styrene	5	5	ND	1000	ND			
1,1,1,2-Tetrachloroethane	5	5	ND	1000	ND			
1,1,2,2-Tetrachloroethane	5	5	ND	1000	ND			
Tetrachloroethene	5	5	ND	1000	7180000*			
Toluene	5	5	ND	1000	64500			
1,2,3-Trichlorobenzene	5	5	ND	1000	ND			
1,2,4-Trichlorobenzene	5	5	ND	1000	ND			
1,1,1-Trichloroethane	5	5	ND	1000	1780000*			
1,1,2-Trichloroethane	5	5	ND	1000	ND			
Trichloroethene	5	5	ND	1000	632000*			
Trichlorofluoromethane	5	5	ND	1000	ND			
1,2,3-Trichloropropane	10	10	ND	2000	ND			
1,2,4-Trimethylbenzene	5	5	ND	1000	27500			
1,3,5-Trimethylbenzene	5	5	ND	1000	18100			
Vinyl Chloride	5	5	ND	1000	6650			
Xylenes (Total)	5	5	ND	1000	48500			

MDL = Method Detection Limit

*Dilution factor = 20,000.

ND = Not Detected (Below DLR).

DLR = MDL X Dilution Factor

NA = Not Analyzed

Reviewed/Approved By: _____


Lee Ingvaldson
Department Supervisor

Date 7/23/97

The cover letter is an integral part of this analytical report.

Spike Recovery and RPD Summary Report - SOIL (ug/kg)

Method : C:\HPCHEM\1\METHODS\VOC35HI.M
 Title : Volatile Organic Compounds
 Last Update : Wed Jul 23 07:52:36 1997
 Response via : Initial Calibration

Non-Spiked Sample: Q97B3280.D

	Spike Sample			Spike Duplicate Sample					
Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD RPD	QC Limits % Rec	
1,1-dichloroethene	0.0	50	44	41	89	82	8	21	37-166
benzene	0.0	50	42	42	83	84	1	21	68-133
trichloroethene	0.0	50	40	42	80	84	5	23	65-129
toluene	0.0	50	42	44	83	87	5	21	74-136
chlorobenzene	0.0	50	44	45	88	90	2	19	83-122

QC Batch # Q97VOCS173

Reviewed/Approved By:

MS for

Date: 7-25-97

Lee Ingvaldson
Organics Supervisor

Client: United Pacific Environmental

QC Batch #: I978G20S192/F978015DS369

Attn: Mr. David Lesperance

Lab No.: 19075-001

Client's Project: Earl Manufacturing

Date Sampled: 07/18/97

Matrix: Sludge

Date Received: 07/18/97

Sample ID.: Tank

Date Extracted: 07/22/97

Analyst Initials: RL/LI

Date Analyzed: 07/22/97

Dilution Factor: 50

Hydrocarbon Chain Distribution

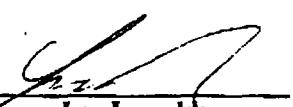
Hydrocarbon L.D.	% Weight Distribution	Results, mg/kg	Detection Limit, mg/kg
<C10	15	58000*	1.0**
C10-C12	14	53500	50
C13-C14	6.3	23700	50
C15-C16	2.5	9300	50
C17-C18	1.7	6550	50
C19-C20	3.0	11300	50
C21-C22	5.6	21150	50
C23-C24	6.2	23650	50
C24-C26	6.9	26050	50
C27-C28	10	38550	50
C29-C30	11	40800	50
C31-C32	7.7	29050	50
C33-C34	5.2	19600	50
C35-C36	2.6	9850	50
C37-C38	2.1	7950	50
C39-C40	ND	ND	50

ND = Not Detected.

* = Sample does not match gasoline chromatograms; however,
quantitation was based using a gasoline standard.

** = Dilution Factor is 25000.

Reviewed/Approved By:


Lee Ingvaldson
Department Supervisor

Date: 7/22/97

The cover letter is an integral part of this analytical report.

Spike Recovery and RPD Summary Report - OIL(mg/kg)

Method : C:\HPCHEM\5\METHODS\CARBONCH.M
Title : FUEL OIL #6
Last Update : Wed Jul 23 12:43:54 1997
Response via : Initial Calibration

Non-Spiked Sample: F97B4623.D

Spike Sample	Spike Duplicate Sample
File ID : F97B4624.D	F97B4625.D
Sample : Blank MS 1G-10ML E-7/22/97	Blank MSD 1G-10ML E-7/22/97
Acq Time: 23 Jul 97 03:21 AM	23 Jul 97 03:52 AM

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
Diesel	0.0	100	72	82	72	82	13	50	50-150

QC Batch # : F978015DS369

Reviewed/Approved by:


Lee Ingvaldson
Organics Supervisor

Date:

7/23/97

Spike Recovery and RPD Summary Report - SOIL

Method : C:\HPCHEM\5\METHODS\8025EXT.M
 Title : 8015GAS/ 8020(BTEX)
 Last Update : Tue Jul 22 12:01:09 1997
 Response via : Initial Calibration

Non-Spiked Sample: I9707351.D

Spike Sample	Spike Duplicate Sample
File ID : I97S7364.D	I97S7365.D
Sample : 19089-001 3ppm MS Gas (+BTEX) SOIL	19089-001 3ppmMSDGas (+BTEX) SOIL
Acq Time: 22 Jul 97 04:45 PM	22 Jul 97 05:07 PM

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD RPD	QC Limits % Rec
Gasoline (mg/kg)	ND	3	2	2	60	66	9	12 47-140
Benzene #2 (ug/kg)	ND	24	20	22	84	89	6	12 66-121
Toluene #2 (ug/kg)	ND	186	164	183	88	98	11	14 62-127

QC Batch #:I978G20S192

Reviewed and Approved by:

Lee Ingvaldson
Organics Supervisor

Date: 7/27/97

Client: United Pacific Environmental
Attn: Mr. David Lesperance

Client's Project: Earl Manufacturing
Date Received: 07/18/97
Matrix: Soil
Units: mg/kg
Digestion Method: EPA 3050

EPA Method 6010 (CCR Metals)

Lab No.:	19075-001	DLR	RESULT								
ANALYTES		DLR									
Antimony	0.25	2.6									
Arsenic	0.25	2.2									
Barium	0.05	139									
Beryllium	0.05	ND									
Cadmium	0.15	3.2									
Chromium ***	0.15	89									
Cobalt	0.15	3.9									
Copper	0.15	905									
Lead	0.25	508									
Mercury **	0.10	0.44									
Molybdenum	0.25	33									
Nickel	0.15	27									
Selenium	0.25	1.9									
Silver	0.05	0.56									
Thallium	0.25	2.9									
Vanadium	0.15	2.1									
Zinc	50****	911									

MDL = Method Detection Limit

ND = Not Detected (Below DLR).

DLR = MDL X Dilution Factor

* = Only listed constituents designated with TTLC and STLC under CCR Title 22

** = Analysis by EPA Method 7471

*** = From Title 22 - If the soluble chromium, as determined by the TCLP set forth in Appendix 1 of Chapter 18 of this division (4), less than 5 mg/l, and the soluble chromium, as determined by the procedure set forth in Appendix 11 of chapter 11, equals or exceeds 560 mg/l and the waste is not otherwise identified as a RCRA hazardous waste pursuant to section 6626.100, then the waste is a non-RCRA hazardous waste.

**** = Dilution Factor is 100, DLR = 50.

Reviewed/Approved By:

Cheryl de Los Reyes

Cheryl De Los Reyes
Department Supervisor

Date: *7/22/97*

The cover letter is an integral part of this analytical report.

Client: United Pacific Environmental
Attn: Mr. David Lesperance

Client's Project Earl Manufacturing

Date Received: 07/18/97

Date Sampled: 07/18/97

MDL = Method Detection Limit

ND = Not Detected (Below DLR)

DF = Dilution Factor (RLB/MLB)

Reviewed/Approved By: Cheryl De Los Reyes Date: 7/22/97
Cheryl De Los Reyes
Department Supervisor

The cover letter is an integral part of this analytical report.



Spike Recovery and RPD Summary Report

Method: 6010
Analyst: LP/OL
QA File: 7203-4S
Data File: ICAPT0723-4

Date Analyzed: 7/23/1997
Date Digested: 7/22/1997
Sample ID: 19013-030
Matrix: Soil

Approved by: Cheryl De Los Reyes
Cheryl De Los Reyes
Inorganics Supervisor

Date: 7-28-97

Spike Recovery and RPD Summary Report

Method: EPA7471

Date: 07-22-97

Analyst: CDR/DJ

Sample ID: 19018-027

Data File: 70722-1

Matrix: LIQUID

QA File: 7203-1

Approved by: Cheryl De La Reyes
Cheryl De La Reyes
Inorganics Supervisor

Date: 7/22/97

CHAIN OF CUSTODY RECORD

Pg 1 of 1

Advanced Technology Laboratories 1510 E. 33rd Street Signal Hill, CA 90807 (562) 989-4045 • FAX (562) 989-4040		FOR LABORATORY USE ONLY: <table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">Batch #:</td> <td>D.O. #</td> <td style="width: 30%;">Method of Transport</td> <td colspan="5">Sample Condition Upon Receipt</td> </tr> <tr> <td>P.O. #:</td> <td></td> <td>Walk-In <input type="checkbox"/></td> <td>1. COOLER TEMP °C</td> <td>(2-6)</td> <td>5. SEALED <input type="checkbox"/></td> <td>Y <input type="checkbox"/> N <input checked="" type="checkbox"/></td> </tr> <tr> <td>Logged By:</td> <td>7/18/97</td> <td>Courier <input type="checkbox"/></td> <td>2. CHILLED <input type="checkbox"/></td> <td>Y <input checked="" type="checkbox"/> N <input type="checkbox"/></td> <td>6. # OF SPLS MATCH COC</td> <td>X <input checked="" type="checkbox"/> N <input type="checkbox"/></td> </tr> <tr> <td></td> <td>Date: 7/18/97 Time: 2:50</td> <td>UPS <input type="checkbox"/></td> <td>3. HEADSPACE (VOA) <input type="checkbox"/></td> <td>Y <input type="checkbox"/> N <input type="checkbox"/></td> <td>7. PRESERVED <input type="checkbox"/></td> <td>Y <input type="checkbox"/> N <input type="checkbox"/></td> </tr> <tr> <td></td> <td></td> <td>FED. EXP. <input type="checkbox"/></td> <td>4. CONTAINER INTACT <input type="checkbox"/></td> <td>Y <input checked="" type="checkbox"/> N <input type="checkbox"/></td> <td>8. CONTR. LOT #</td> <td></td> </tr> <tr> <td></td> <td></td> <td>ATL <input checked="" type="checkbox"/></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>										Batch #:	D.O. #	Method of Transport	Sample Condition Upon Receipt					P.O. #:		Walk-In <input type="checkbox"/>	1. COOLER TEMP °C	(2-6)	5. SEALED <input type="checkbox"/>	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	Logged By:	7/18/97	Courier <input type="checkbox"/>	2. CHILLED <input type="checkbox"/>	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	6. # OF SPLS MATCH COC	X <input checked="" type="checkbox"/> N <input type="checkbox"/>		Date: 7/18/97 Time: 2:50	UPS <input type="checkbox"/>	3. HEADSPACE (VOA) <input type="checkbox"/>	Y <input type="checkbox"/> N <input type="checkbox"/>	7. PRESERVED <input type="checkbox"/>	Y <input type="checkbox"/> N <input type="checkbox"/>			FED. EXP. <input type="checkbox"/>	4. CONTAINER INTACT <input type="checkbox"/>	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	8. CONTR. LOT #				ATL <input checked="" type="checkbox"/>				
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		Client: UNITED PACIFIC ENVIRONMENTAL Attn: DAVID LESPERANCE																																																				
		Address: 2699 E 28th St Suite 405 City SIGNAL HILL State CA Zip Code 90804 TEL: (562) 981-3346 FAX: (562) 427-5806																																																				
		Project Name: DELL MANUFACTURING Project #: DAVID LESPERANCE Relinquished by: (Signature and Printed Name) DAVID LESPERANCE Date: 7/18/97 Time: 10:45 Received by: (Signature and Printed Name) DAVID LESPERANCE Date: 7/18/97 Time: 10:45 Relinquished by: (Signature and Printed Name) DAVID LESPERANCE Date: Time: Received by: (Signature and Printed Name) DAVID LESPERANCE Date: Time: Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:																																																				
SHIP TO LAB: (SUB CONTRACT) TEST: ATL #: DATE: CLIENT I.D.:		I hereby authorize ATL to perform the work indicated below: Project Mgr /Submitter: DAVID LESPERANCE 7/18/97 Print Name <i>David Lesperance</i> Signature		Send Report To: Attn: DAVID LESPERANCE Co: UPE Address _____ City _____ State _____ Zip _____		Special Instructions/Comments: <i>ANALYZE SLUDGE</i>																																																
Unless otherwise requested, all samples will be disposed 45 days after receipt.		Sample Archive/Disposal: <input type="checkbox"/> Laboratory Standard <input type="checkbox"/> Other <input type="checkbox"/> Return To: _____ <i>* \$10.00 FEE PER HAZARDOUS SAMPLE DISPOSAL.</i>		Circle or Add Analysis(es) Requested 80/810 (Residues/TEX) (Inorganic Volatiles/GC) 80/820 (Organic Volatiles/GC) 80/830 (Pesticides/PCP/GC) 80/840 (Nitrates/GC/AS) 80/850 (PCP/GC/AS) 80/870 (PAH/GC/AS) 80/880 TPH/TEX (Gas/PCP/GC) 80/890 TPH/GC (Dissolved/Oil) 80/900 Total Oil (CAC/80/90/80) 80/910 TPH/I (TPH/I) 80/920 Total Solids (CAC/80/90/80)		CIRCLE APPROPRIATE MATRIX SOLID • SOIL • SLUDGE OIL • SOLVENT • LIQUID WATER • WASTEWATER DRINKING WATER AIR WIRE • FILTER OTHER		QA/QC RTME <input type="checkbox"/> RWQCB <input type="checkbox"/> WIP <input type="checkbox"/> NAVY <input type="checkbox"/> CT <input type="checkbox"/> OTHER <input type="checkbox"/>																																														
I T E M	LAB USE ONLY: Batch #:		Sample Description		Container(s)		TAT #		Type																																													
	Lab No.		Sample I.D. 7/18/97 10:35		Date Time		TAT #		Type																																													
19075-001		TANK		✓		✓		✓																																														
<i>7/18/97</i> <i>DAVID LESPERANCE</i> <i>7/18/97</i> <i>DAVID LESPERANCE</i> <i>D 156 NRC 402</i>																																																						
• TAT starts 8 a.m. following day if samples received after 5 p.m.		TAT: A= Overnight ≤ 24 hr		B= Emergency Next workday		C= Critical 2 Workdays		D= Urgent 3 Workdays		E= Routine 7 Workdays																																												
Preservatives: H=HCl N=NHO ₃ S=H ₂ SO ₄ C=4°C Z=Zn(AC) ₂ O=NaOH T=Na ₂ S ₂ O ₃																																																						
Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal																																																						

APPENDIX D
SLUDGE AND TANK RINSE MANIFEST

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. CAD00824684601870	Manifest Document No. 01870	2. Page 1 1	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address EARL MANUFACTURING 11862 BURKE ST. ANAHEIM CALIFORNIA, CA. 4. Generator's Phone (310) 945-2771					
5. Transporter 1 Company Name ADAM'S SERVICE, INC.		6. US EPA ID Number AL722125668			
7. Transporter 2 Company Name		8. US EPA ID Number			
9. Designated Facility Name and Site Address STATE WIDE ENVIRONMENTAL SERVICES, INC. 12612 MAIN ST. L.A. CA 90061		10. US EPA ID Number END100088262			
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) HAZARDOUS WASTE LIQUID, N.O.S. (DICHLORETHANE), 9, NA 3082, II		12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol	
b.		TJ.	TJ.	G	
c.					
d.					
15. Special Handling Instructions and Additional Information ERG #171 PROFILE # 51205-A					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.					
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name John C. / J. C. /		Signature X	Month 10	Day 13	Year 97
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Tim Jeancal		Signature Tim Jeancal	Month 10	Day 13	Year 97
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature	Month	Day	Year
19. Discrepancy Indication Space					
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name John C. / J. C. /					

DO NOT WRITE BELOW THIS LINE.

APPENDIX E
TANK DESTRUCTION CERTIFICATE

CERTIFICATE OF DESTRUCTION

COMPANY NAME Carl Manufacturing
ADDRESS 1863 Burke St
Santa Fe Springs

ADAMS STEEL CERTIFIES THAT 1) 1K steel

HAS/HAVE BEEN SCRAPPED, CRUSHED, AND
TOTALLY DESTROYED ON: 8/19/97

SIGNATURE Cheryl Hartman

TITLE Weighmaster

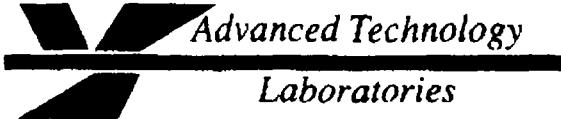
DATE 8/19/97

ADAMS STEEL
3200 E. FRONTERA ROAD
ANAHEIM CA 92806
(714) 777-CARS
FAX (714) 630-5836

APPENDIX F

LABORATORY REPORT

TANK REMOVAL SAMPLES



RECEIVED

AUG 28 1997

August 20, 1997

ELAP No.: 1838 UNITED PACIFIC ENVIRONMENTAL

United Pacific Environmental
2699 E. 28th St., Suite 405
Signal Hill, CA 90806

ATTN: Mr. Chris Sweeney

Client's Project: Earl's
Lab No.: 19580-001/002

Gentlemen:

Enclosed are the results for sample(s) received by Advanced Technology Laboratories and tested for the parameters indicated in the enclosed chain of custody.

Thank you for the opportunity to service the needs of your company. Please feel free to call me at (310) 989 - 4045 if I can be of further assistance to your company.

Sincerely,

A handwritten signature in black ink, appearing to read "Edgar P. Caballero".

Edgar P. Caballero
Laboratory Director
EPC/ms

Enclosures

This cover letter is an integral part of this analytical report.

This report pertains only to the samples investigated and does not necessarily apply to other apparently identical or similar materials. This report is submitted for the exclusive use of the client to whom it is addressed. Any reproduction of this report or use of this Laboratory's name for advertising or publicity purpose without authorization is prohibited.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

LABORATORY REPORT FORM

Laboratory Name: Advanced Technology Laboratories

Address: 1500 E. 33rd St. Signal Hill, CA 90807

Telephone: (562) 989 - 4045

Laboratory Certification
(ELAP) No.: 1838 Expiration Date: December 31, 1998

Authorized Signature
Edgar Caballero, Laboratory Director 

Signature, Date: 8-26-97

Client Name: United Pacific Environmental

Project No.: Earl's

Date(s) Sampled: 08/13/97 To 08/13/97

Date(s) Received: 08/13/97 To 08/13/97

Date(s) Reported: 08/25/97 To 08/25/97

Chain of Custody received: Yes No

Comments:

(RWQCB LabForm10A)

ANALYTICAL TEST RESULT

Reporting Unit (Circle One): mg/kg

DATE ANALYZED	8/19/97	8/19/97	8/19/97	
DATE EXTRACTED	8/19/97	8/19/97	8/19/97	
EXTRACTION METHOD	418.1	418.1	418.1	
EXTRACTION MATERIAL	Freon-113	Freon-113	Freon-113	
EXTRACTION DURATION (hr/min)	2 min	2 min	2 min	
DILUTION FACTOR	1	10	1	
LAB SAMPLE I.D.	Blank	19580-001	19580-002	
CLIENT SAMPLE I.D.	1	1A	1B	
PETROLEUM HYDROCARBONS	MDL	MB	ND	
Total Petroleum Hydrocarbons (EPA 418.1)	10	ND	1840	112
SURROGATE	SPK CONC	ACCP %	%RC	ND

a = Report Any Value \geq MDL

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed

SPK CONC = Spiking Concentration; ACP % = Acceptable Range of Percent; %RC = % Recovery

REQUIREMENT

1. Provide details of corrective actions in any out of control events (e.g., re-calibration, blank contamination, etc.).
2. Analytical results are not to be blank adjusted.
3. Lowest concentration injected for initial calibration should not exceed three times of laboratory method detection limits.
4. Chemical standards for QC check samples and calibration should be obtained from different supply sources.
5. Raw data for calibration standards, quality control check samples, and selected environmental samples must be submitted upon request.

QA/QC REPORT
 Reporting Unit (Circle One): mg/kg

I. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE PERFORMED: 8/19/97
 BATCH #: 19689-033
 LAB SAMPLE I.D.: —

ANALYTE	SPK CONC	MS	% MS	MSD	% MSD	RPD	ACP %MS	ACP RPD
TRPH	400	404	101	398.4	99.6	1.4	70-120	20

II. Laboratory Quality Control Check Sample

DATE PERFORMED: 8/19/97
 BATCH #: Blank
 LAB SAMPLE I.D.: —

ANALYTE	SPK CONC	MS	% MS	RPD	ACP
TRPH	400	381.6	95		80-120

III. Calibration Standard

3a. Submit Copies of Calibration Curves and Reference Standards

3b. Fill in Table Below If Quantification of Sample Result Is Based On Response Factor (RF)

COMPOUND	INITIAL CALIBRATION DATE:		DAILY CALIBRATION DATE:	
	INITIAL RF (ave)	% RSD \leq 20%	DAILY RF	% DIFF w/RF (ave) $\leq \pm 15\%$

SPK CONC = Spiking Concentration;

%MS = Percent Recovery of MS; %MSD = Percent Recovery of MSD

RPD = Relative Percent Difference; ACP = Acceptable Range of Percent

INITIAL RFave = Average Response Factor From Initial Calibration

DAILY RF = Response Factor From Daily Calibration

%RSD = Percent Relative Standard Deviation; %DIFF = Percent Difference

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

LABORATORY REPORT FORM

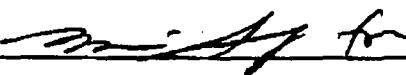
Laboratory Name: Advanced Technology Laboratories

Address: 1500 E. 33rd St. Signal Hill, CA 90807

Telephone: (562) 989 - 4045

Laboratory Certification

(ELAP) No.: 1838 Expiration Date: December 31, 1998

Authorized Signature
Edgar Caballero, Laboratory Director 

Signature, Date: 8-26-97

Client Name: United Pacific Environmental

Project No.: Earl's

Date(s) Sampled: 08/13/97 To 08/13/97

Date(s) Received: 08/13/97 To 08/13/97

Date(s) Reported: 08/25/97 To 08/25/97

Chain of Custody received: Yes No

Comments:

(RWQCB LabForm10A)

ANALYTICAL TEST RESULT

Reporting Unit (Circle One): ug/kg

DATE ANALYZED	08/19/97	08/19/97	08/19/97	
DATE EXTRACTED	-	-	-	
DILUTION FACTOR	1	5000	20	
LAB SAMPLE I.D.	Blank	19580-001	19580-002	
CLIENT SAMPLE I.D.	-	1A	1B	
b COMPOUND	MDL	MB		
Bromobenzene	5	ND	ND	ND
Bromodichloromethane	5	ND	ND	ND
Bromoform	5	ND	ND	ND
Bromomethane	5	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND
Chloroethane	5	ND	ND	ND
Chloroform	5	ND	ND	ND
1-Chlorohexane	NA	NA	NA	NA
Chloromethane	5	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND
Dibromomethane	5	ND	ND	ND
Dichlorodifluoromethane	5	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	5	ND	ND	228
1,2-Dichloroethane (1,2-DCA)	5	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)	5	ND	ND	ND
trans-1,2-Dichloroethylene	5	ND	ND	ND
Dichloromethane	5	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND
cis-1,3-Dichloropropylene	5	ND	ND	ND
trans-1,3-Dichloropropylene	5	ND	ND	ND
1,1,1,2-Tetrachloroethane	5	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND
Tetrachloroethylene (PCE)	5	ND	422000	1470
1,1,1-Trichloroethane (111-TCA)	5	ND	ND	ND
1,1,2-Trichloroethane (112-TCA)	5	ND	ND	ND
Trichloroethylene (TCE)	5	ND	ND	ND
1,2,3-Trichloropropane	5	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND
Vinyl chloride	5	ND	ND	ND
Benzene	5	ND	ND	ND
Chlorobenzene	5	ND	ND	ND
1,2-Dichlorobenzene	5	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND
1,4-Dichlorobenzene	5	ND	ND	ND
Ethyl benzene	5	ND	ND	ND
Toluene	5	ND	ND	ND

ANALYTICAL TEST RESULT (cont'd)

COMPOUND	MDL	MB	%RQ-001	%RQ-002	
m,p-Xylenes	5	ND	ND	ND	
o-Xylene	5	ND	ND	ND	
Acetone *	NA	NA	NA	NA	
Acrolein *	NA	NA	NA	NA	
Acrylonitrile *	NA	NA	NA	NA	
Bromochloromethane	5	ND	ND	ND	
n-Butylbenzene	5	ND	ND	ND	
sec-Butylbenzene	5	ND	ND	ND	
tert-Butylbenzene	5	ND	ND	ND	
2-Chloroethylvinyl ether	NA	NA	NA	NA	
2-Chlorotoluene	5	ND	ND	ND	
4-Chlorotoluene	5	ND	ND	ND	
Dichlorodifluoromethane	5	ND	ND	ND	
cis-1,2-Dichloroethylene	5	ND	ND	ND	
1,3-Dichloropropane	5	ND	ND	ND	
2,2-Dichloropropane	5	ND	ND	ND	
1,1-Dichloropropylene	5	ND	ND	ND	
Ethylene dibromide (EDB)	5	ND	ND	ND	
Hexachlorobutadiene	5	ND	ND	ND	
Isopropylbenzene	5	ND	ND	ND	
p-Isopropyltoluene	5	ND	ND	ND	
Methyl Ethyl Ketone	5	ND	ND	ND	
Methyl Isobutyl Ketone	5	ND	ND	ND	
Naphthalene	5	ND	ND	ND	
n-Propylbenzene	5	ND	ND	ND	
Styrene	5	ND	ND	ND	
1,2,3-Trichlorobenzene	5	ND	ND	ND	
1,2,4-Trichlorobenzene	5	ND	ND	ND	
1,2,4-Trimethylbenzene	5	ND	ND	ND	
1,3,5-Trimethylbenzene	5	ND	ND	ND	
1,1,2-Trichloro-trifluoroethane	NA	NA	NA	NA	
SURROGATE	SPK CONC	ACP%	MB %RC	%RC	%RC
1,2-Dichloroethane-d4	50	90-118	97	94	96
4-Bromofluorobenzene	50	71-120	99	99	106
Dibromofluoromethane	50	50-150	98	99	99
Toluene-d8	50	81-128	100	100	102

a = Report Any Value \geq MDL; b = Listed Compounds Are Ordered by Laboratory Analytical Methods: Halogenated, Aromatic, then Remaining Compounds Identified by GC/MS.

SPK CONC = Spiking Concentration ($\leq 5 \times$ PQL); ACP % = Acceptable Range of Percent; %RC = % Recovery

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed

* = Additional 645 analyte

Project No.: Earl's

QA/QC REPORT

Reporting Unit (Circle One): ug/kg

I. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE PERFORMED: 08/19/97
BATCH #: P97VOCS112
LAB SAMPLE I.D.: 19580-001

ANALYTE	SPK CONC	MS	% MS	MSD	% MSD	RPD	ACP %MS	ACP RPD
1,1-Dichloroethene	50	49	98	49	98	1	37-168	23
Benzene	50	49	97	52	103	6	68-133	21
Trichloroethene	50	48	96	52	103	7	65-129	23
Toluene	50	48	96	51	102	6	74-136	21
Chlorobenzene	50	47	95	49	98	3	83-122	19

II. Laboratory Quality Control Check Sample

DATE PERFORMED: 08/19/97
BATCH #: P97VOCS112
LAB SAMPLE I.D.: LCS

ANALYTE	SPK CONC	RESULT	% RECOVERY	ACP %
1,1-Dichloroethene	50	52	104	80-120
Benzene	50	50	100	80-120
Trichloroethene	50	51	102	80-120
Toluene	50	50	100	80-120
Chlorobenzene	50	48	96	80-120
Tetrachloroethene	50	50	100	80-120
n-Propylbenzene	50	49	98	80-120
Naphthalene	50	58	110	80-120

QA\QC REPORT**I. Calibration Standard****(A) Initial Calibration**

Date Performed:	8/18/97	Analytical Method:	8260
Standard Supply Source:	Accustandard	Date of Source:	7/30/97
Instrument I.D.:	MS-1	Lot Number:	A7040270,A7050360 A7050537,A7060176

COMPOUND	DETECTOR	R _t (min)	CONC (ppm)	AREA	R _r	AVE R _r	SD	%RSD
dichlorodifluoromethane	MS	1.85	10	55821	0.41	0.41	0.01	2.27
		1.86	50	280994	0.41			
		1.86	100	558819	0.41			
		1.85	200	1148823	0.42			
		1.85	400	2145928	0.39			
chloromethane	MS	1.98	10	64402	0.47	0.47	0.01	1.39
		1.98	50	314050	0.46			
		1.98	100	641035	0.47			
		1.98	200	1300034	0.47			
		1.98	400	2531541	0.46			
vinyl chloride	MS	2.11	10	81704	0.45	0.41	0.03	7.00
		2.11	50	276577	0.40			
		2.11	100	551732	0.40			
		2.11	200	1103730	0.40			
		2.11	400	2054044	0.37			
bromomethane	MS	2.45	10	42795	0.31	0.31	0.01	4.26
		2.45	50	218298	0.32			
		2.45	100	429979	0.31			
		2.44	200	867483	0.31			
		2.45	400	1567405	0.29			
chloroethane	MS	2.63	10	39120	0.29	0.27	0.01	3.52
		2.63	50	187030	0.27			
		2.64	100	376336	0.27			
		2.62	200	767892	0.28			
		2.63	400	1428421	0.26			
trichlorofluoromethane	MS	3.25	10	66356	0.49	0.48	0.01	2.77
		3.25	50	335104	0.49			
		3.25	100	662537	0.48			
		3.23	200	1358001	0.49			
		3.22	400	2514043	0.46			
iodomethane	MS	4.04	10	168020	1.23	1.25	0.03	2.09
		4.03	50	859349	1.25			
		4.03	100	1716305	1.25			
		4	200	3584423	1.29			
		3.99	400	6704886	1.22			

(A) Initial Calibration (Cont.)

COMPOUND	DETECTOR	RT	CONC. (ug/L)	AREA	RF	AVE RF	SD	%RSD
1,1-dichloroethene	MS	4.59	10	40570	0.30	0.30	0.01	2.41
		4.55	50	208947	0.30			
		4.55	100	413949	0.30			
		4.53	200	855718	0.31			
		4.52	400	1593589	0.29			
trans-1,2-dichloroethene	MS	5.42	10	49667	0.36	0.36	0.01	1.64
		5.39	50	246540	0.36			
		5.38	100	479472	0.35			
		5.37	200	985918	0.36			
		5.35	400	1998455	0.36			
methylene chloride	MS	5.91	10	48859	0.36	0.36	0.01	2.42
		5.87	50	249533	0.36			
		5.88	100	488113	0.36			
		5.86	200	1014204	0.37			
		5.83	400	1014204	0.34			
cis-1,2-dichloroethene	MS	6.91	10	55308	0.41	0.42	0.01	2.22
		6.89	50	288859	0.42			
		6.89	100	569069	0.42			
		6.9	200	1188539	0.43			
		6.87	400	2260026	0.41			
1,1-dichloroethane	MS	7.1	10	96014	0.70	0.70	0.01	1.36
		7.06	50	479455	0.70			
		7.06	100	957717	0.70			
		7.07	200	1963770	0.71			
		7.03	400	3759146	0.69			
2,2-dichloropropane	MS	7.19	10	86241	0.63	0.62	0.02	2.72
		7.17	50	426893	0.62			
		7.17	100	849675	0.62			
		7.19	200	1729383	0.63			
		7.15	400	3232228	0.59			
1,2-dichloropropane	MS	7.28	10	60834	0.39	0.39	0.01	2.07
		7.26	50	310948	0.39			
		7.26	100	623126	0.39			
		7.28	200	1291769	0.41			
		7.24	400	2445982	0.39			
chloroform	MS	8.13	10	88762	0.65	0.66	0.01	1.86
		8.11	50	459184	0.67			
		8.11	100	914094	0.67			
		8.11	200	1870339	0.68			
		8.08	400	3555770	0.65			
trans-1,2-dichloroethene	MS	1.68	10	49667	0.36	0.36	0.01	1.64
		1.68	50	246540	0.36			
		1.68	100	479472	0.35			
		1.68	200	985918	0.36			
		1.68	400	1998455	0.36			

(A) Initial Calibration (Cont.)

COMPOUND	DETECTOR	RT	CONC (ng/ml)	AREA	RF	AVE RF	SD	%RSD
1,2-dichloropropane	MS	8.51	10	239996	0.39	0.39	0.01	2.07
		8.49	50	250109	0.39			
		8.49	100	248230	0.39			
		8.51	200	239338	0.41			
		8.47	400	239338	0.39			
1,1,1-trichloroethane	MS	8.63	10	76191	0.56	0.55	0.01	1.85
		8.62	50	385317	0.56			
		8.63	100	758617	0.55			
		8.64	200	1555402	0.56			
		8.62	400	2948852	0.54			
trichloroethylene	MS	8.64	50	56608	0.36	0.36	0.01	1.48
		8.62	50	281587	0.36			
		8.63	50	566446	0.35			
		8.64	50	1160360	0.37			
		8.61	50	2276618	0.36			
bromodichloromethane	MS	10	10	65745	0.42	0.43	0.01	1.88
		9.97	50	343015	0.43			
		9.97	100	680210	0.42			
		9.99	200	1400761	0.44			
		9.97	400	2694272	0.43			
1,2-dichloroethane	MS	10.02	10	68782	0.44	0.44	0.02	3.93
		10.01	50	363273	0.46			
		10	100	699599	0.44			
		10.02	200	1427670	0.45			
		10	400	2617416	0.41			
1,1-dichloropropene	MS	10.06	10	26534	0.17	0.17	0.00	2.00
		10.05	50	136442	0.17			
		10.05	100	272657	0.17			
		10.06	200	566276	0.18			
		10.05	400	1084769	0.17			
benzene	MS	10.29	10	231538	1.49	1.46	0.03	2.23
		10.27	50	1141932	1.44			
		10.28	100	2309517	1.44			
		10.28	200	4733669	1.49			
		10.27	400	8962605	1.42			
carbon tetrachloride	MS	12.32	50	33068	0.37	0.37	0.01	2.68
		12.31	50	176933	0.38			
		12.32	50	340125	0.37			
		12.32	50	718863	0.39			
		12.32	50	1384859	0.36			
2-chloroethyl vinyl ether	MS	12.57	10	167826	1.97	1.91	0.04	2.12
		12.56	50	858203	1.88			
		12.56	100	1720505	1.90			
		12.56	200	3432429	1.87			
		12.57	400	6833494	1.93			

(A) Initial Calibration (Cont.)

COMPOUND	DETECTOR	RT	CONC (ug/L)	AREA	RF	AVE RF	SD	%RSD
cis-1,3-dichloropropene	MS	13.58	50	84292	0.54	0.56	0.01	2.54
		13.57	50	441403	0.56			
		13.57	50	897326	0.56			
		13.57	50	1845280	0.58			
		13.58	50	3570374	0.56			
trans-1,3-dichloropropene	MS	13.01	10	73286	0.47	0.49	0.01	2.58
		13	50	387919	0.49			
		13	100	782428	0.49			
		13	200	1604624	0.51			
		13.01	400	3053389	0.48			
toluene	MS	13.25	10	235106	1.51	1.52	0.03	1.83
		13.24	50	1203878	1.52			
		13.24	100	2434040	1.51			
		13.25	200	4968302	1.56			
		13.26	400	9418564	1.49			
1,1,2-trichloroethane	MS	13.7	10	35793	0.23	0.24	0.01	2.87
		13.69	50	190160	0.24			
		13.69	100	373254	0.23			
		13.7	200	783824	0.25			
		13.71	400	1516368	0.24			
styrene	MS	14.89	10	151322	1.09	1.11	0.02	2.23
		14.89	50	798710	1.11			
		14.89	100	1613728	1.12			
		14.9	200	3306782	1.15			
		14.91	400	6310994	1.09			
1,2-dibromoethane	MS	15.05	10	39951	0.26	0.27	0.01	4.12
		15.04	50	207676	0.26			
		15.04	100	431870	0.27			
		15.04	200	898868	0.28			
		15.06	400	1769275	0.28			
n-butylbenzene	MS	15.41	10	178493	2.10	2.11	0.01	0.49
		15.41	50	964606	2.12			
		15.41	100	3880027	2.10			
		15.42	200	7507013	2.12			
		15.43	400	386450	2.12			
1,3-dichloropropane	MS	15.66	10	80101	0.58	0.57	0.01	1.78
		15.66	50	411762	0.57			
		15.67	100	808701	0.56			
		15.68	200	1681962	0.59			
		15.71	400	3301578	0.57			
dibromochloromethane	MS	16.08	10	34591	0.25	0.26	0.01	3.72
		16.08	50	187463	0.26			
		16.08	100	383082	0.26			
		16.09	200	791240	0.28			
		16.1	400	1568083	0.27			

(A) Initial Calibration (Cont.)

COMPOUND	DETECTOR	RT	COND (ppm)	AREA	RF	AVE RF	SD	%RSD
tetrachloroethene	MS	16.31	10	73403	0.53	0.53	0.01	2.02
		16.31	50	375406	0.52			
		16.32	100	739966	0.51			
		16.33	200	1550354	0.54			
		16.36	400	3054815	0.53			
chlorobenzene	MS	16.37	10	133397	0.96	0.98	0.02	2.16
		16.37	50	702678	0.98			
		16.37	100	1405241	0.97			
		16.39	200	2917844	1.02			
		16.41	400	5618246	0.97			
1,1,1,2-tetrachloroethane	MS	17.02	10	45342	0.33	0.33	0.01	2.23
		17.01	50	238723	0.33			
		17.02	100	479526	0.33			
		17.02	200	987527	0.34			
		17.03	400	1880268	0.33			
m/p-xylene	MS	17.22	10	393484	1.42	1.40	0.04	3.13
		17.22	50	2044543	1.42			
		17.22	100	4109757	1.42			
		17.23	200	8158088	1.42			
		17.25	400	1.5E+07	1.32			
bromoform	MS	17.35	10	41730	0.30	0.31	0.01	3.06
		17.35	50	219951	0.31			
		17.35	100	435896	0.30			
		17.38	200	925787	0.32			
		17.39	400	0.31628	0.32			
1,2-dibromo-3-chloropropane	MS	17.47	10	11283	0.13	0.11	0.01	9.50
		17.47	50	50251	0.11			
		17.47	100	93477	0.10			
		17.49	200	209271	0.11			
		17.5	400	403132	0.11			
o-xylene	MS	18.1	10	205074	1.48	1.42	0.06	4.09
		18.1	50	1024174	1.43			
		18.11	100	2055115	1.42			
		18.11	200	4074654	1.42			
		18.13	400	7649670	1.32			
1,2,4-trichlorobenzene	MS	18.2	10	60289	0.71	0.72	0.05	6.50
		18.2	50	314041	0.69			
		18.21	100	607738	0.67			
		18.22	200	1337620	0.73			
		18.24	400	2810492	0.78			
naphthalene	MS	18.27	10	78844	0.93	0.94	0.10	11.07
		18.27	50	393078	0.86			
		18.28	100	767402	0.85			
		18.29	200	1789496	0.98			
		18.31	400	3926574	1.11			

(A) Initial Calibration (Cont.)

COMPOUND	DETECTOR	RT	COND. (μ g/L)	AREA	RF	AVE RF	SD	%RSD
1,1,2,2-tetrachloroethane	MS	18.63	10	53318	0.63	0.60	0.02	3.02
		18.63	50	268354	0.59			
		18.63	100	529648	0.59			
		18.64	200	1104169	0.60			
		18.68	400	2194102	0.62			
1,2,3-trichloropropane	MS	19.32	10	46270	0.54	0.52	0.02	3.55
		19.32	50	235876	0.52			
		19.33	100	454521	0.50			
		19.34	200	957957	0.52			
		19.36	400	1767503	0.50			
isopropylbenzene	MS	19.34	10	233126	2.74	2.74	0.02	0.87
		19.34	50	1234170	2.71			
		19.34	100	2488258	2.75			
		19.36	200	5068971	2.76			
		19.39	400	9614564	2.71			
bromobenzene	MS	19.64	10	69616	0.82	0.83	0.02	2.51
		19.65	50	374394	0.82			
		19.64	100	732022	0.81			
		19.66	200	1548410	0.84			
		19.67	400	3049910	0.86			
ethylbenzene	MS	19.82	10	167826	1.97	1.91	0.04	2.12
		19.82	50	858203	1.88			
		19.83	100	1720505	1.90			
		19.84	200	3432429	1.87			
		19.87	400	6833494	1.93			
<i>n</i> -propylbenzene	MS	19.83	20	280956	3.30	3.27	0.03	0.98
		19.84	100	1482083	3.26			
		19.84	200	2952979	3.26			
		19.86	400	6047321	3.30			
		19.88	800	1.1E+07	3.23			
2-chlorotoluene	MS	20.21	10	187560	2.21	2.19	0.06	2.68
		20.21	50	1017614	2.23			
		20.22	100	2003355	2.21			
		20.23	200	4085197	2.23			
		20.25	400	7417464	2.09			
1,3,5-trimethylbenzene	MS	20.46	10	152091	1.79	1.87	0.05	2.48
		20.46	50	847005	1.86			
		20.46	100	1701000	1.88			
		20.47	200	3476378	1.90			
		20.49	400	6759904	1.91			
tert-butylbenzene	MS	21.07	10	169779	2.00	2.00	0.02	1.04
		21.07	50	905946	1.99			
		21.08	100	1812974	2.00			
		21.08	200	3718621	2.03			
		21.1	400	6989653	1.97			

(A) Initial Calibration (Cont.)

COMPOUND	DETECTOR	RT	CDNC (µg/L)	AREA	RF	AVE RF	SD	%RSD
1,2,4-trimethylbenzene	MS	21.75	10	157071	1.85	1.84	0.02	1.14
		21.75	50	828085	1.82			
		21.75	1000	1653565	1.83			
		21.75	200	3395060	1.85			
		21.75	400	6637664	1.87			
1,3-dichlorobenzene	MS	23.43	50	119560	1.41	1.39	0.02	1.52
		23.43	50	627219	1.38			
		23.43	50	1237531	1.37			
		23.44	50	2586594	1.41			
		23.44	50	2586594	1.41			
sec-butylbenzene	MS	23.53	10	253732	2.98	2.95	0.03	1.05
		23.53	50	1344127	2.95			
		23.53	100	2638712	2.91			
		23.53	200	5463724	2.98			
		23.54	400	1E+07	2.93			
1,4-dichlorobenzene	MS	23.91	10	124071	0.54	0.52	0.02	3.55
		23.91	50	637901	0.52			
		23.91	100	1256757	0.50			
		23.91	200	2586594	0.52			
		23.92	400	1767503	0.50			
1,2,3-trichlorobenzene	MS	23.96	10	48876	0.57	0.60	0.04	7.26
		23.96	50	262358	0.58			
		23.96	100	509607	0.56			
		23.96	200	1117425	0.61			
		23.96	400	2376409	0.67			
1,2-dichlorobenzene	MS	23.96	10	124071	1.46	1.41	0.03	1.91
		23.96	50	637901	1.40			
		23.96	100	1256757	1.39			
		23.96	200	2586594	1.41			
		23.96	400	5012625	1.41			

QA/QC REPORT**I. Calibration Standard****(B). Continuing Calibration (Mid-Point)**

Compound	Detector	RT	Conc. Unit (ug/L)	Area	RF	% Diff.	ACP RGE % Diff.
dichlorodifluoromethane	MS	2.53	50	255803	0.48	-18.40	NA
chloromethane	MS	2.70	50	294787	0.55	-19.40	NA
vinyl chloride	MS	2.81	50	254559	0.48	-17.90	<20
bromomethane	MS	3.13	50	193265	0.36	-17.70	NA
chloroethane	MS	3.20	50	179572	0.34	-23.20	NA
trichlorodifluoromethane	MS	3.51	50	336912	0.63	-31.70	NA
iodomethane	MS	4.06	50	169498	0.32	-33.50	NA
1,1-dichloroethene	MS	3.92	50	189387	0.36	-19.90	<20
methylene chloride	MS	4.15	50	228035	0.43	-16.30	NA
trans-1,2-dichloroethene	MS	4.52	50	221756	0.42	-16.30	NA
1,1-dichloroethane	MS	4.48	50	426018	0.80	-14.60	NA
cis-1,2-dichloroethene	MS	4.75	50	255737	0.48	-15.50	NA
2,2-dichloropropane	MS	4.75	50	429233	0.81	-30.80	NA
chloroform	MS	4.75	50	401514	0.76	-14.10	<20
1,1,1-trichloroethane	MS	5.41	50	380047	0.57	-28.90	NA
1,2-dichloroethane	MS	5.95	50	368406	0.56	-26.20	NA
1,1-dichloropropene	MS	6.93	50	118108	0.18	-3.20	NA
benzene	MS	5.87	50	1046555	1.58	-8.40	NA
1,2-dichloropropane	MS	6.93	50	288735	0.44	-10.80	<20
trichloroethene	MS	6.88	50	249656	0.38	-4.70	NA
dibromomethane	MS	7.07	50	161170	0.24	-11.10	NA
bromodichloromethane	MS	7.11	50	334302	0.50	-17.40	NA
cis-1,3-dichloropropene	MS	7.68	50	418863	0.63	-12.60	NA
trans-1,3-dichloropropene	MS	8.20	50	368644	0.56	-14.10	NA
toluene	MS	8.24	50	1098851	1.66	-9.00	<20
1,1,2-trichloroethane	MS	8.40	50	167571	0.25	-6.20	NA
1,2-dibromoethane	MS	9.26	50	186557	0.28	-4.10	NA
1,3-dichloropropane	MS	8.64	50	370029	0.61	-5.80	NA
dibromochloromethane	MS	8.99	50	171248	0.28	-6.20	NA
tetrachloroethene	MS	9.11	50	320530	0.53	0.20	NA
chlorobenzene	MS	9.94	50	626704	1.03	-4.80	NA
1,1,1,2-tetrachloroethane	MS	9.99	50	222932	0.37	-10.10	NA
ethylbenzene	MS	10.13	50	1164346	1.91	-6.80	<20
m/p-xylene	MS	10.27	100	1882231	3.09	-10.10	NA
bromoform	MS	10.92	50	184371	0.30	2.30	NA

(B) Continuing Calibration (Cont.)

Compound	Detector	Rt	Corr. Unit (ppm)	Area	RF	% Diff	ADP RGE % Diff
styrene	MS	10.76	50	701706	1.15	-3.40	NA
o-xylene	MS	10.80	50	987707	1.62	-14.50	NA
1,1,2,2-tetrachloroethane	MS	11.23	50	222101	0.59	2.00	NA
1,2,3-trichloropropane	MS	11.39	50	192579	0.51	0.60	NA
isopropylbenzene	MS	11.32	50	1110387	0.24	-8.30	NA
bromobenzene	MS	11.70	50	314953	0.84	-1.10	NA
4-chlorotoluene	MS	11.97	50	782086	2.09	-9.20	NA
n-propylbenzene	MS	11.86	50	1325951	3.54	-8.00	NA
2-chlorotoluene	MS	12.05	50	919639	2.45	-11.80	NA
1,3,5-trimethylbenzene	MS	12.08	50	741095	1.98	-6.00	NA
tert-butylbenzene	MS	12.51	50	804947	2.15	-7.50	NA
1,2,4-trimethylbenzene	MS	12.55	50	708587	1.89	-2.60	NA
1,3-dichlorobenzene	MS	12.89	50	539253	1.44	-3.10	NA
sec-butylbenzene	MS	12.77	50	1170654	3.12	-5.80	NA
1,4-dichlorobenzene	MS	12.89	50	539253	1.44	-1.70	NA
4-isopropyltoluene	MS	12.94	50	833693	2.22	-6.30	NA
1,2-dichlorobenzene	MS	12.89	50	539253	1.44	-1.70	NA
1,2-dichlorobenzene	MS	12.89	50	539253	1.44	-1.70	NA
n-butylbenzene	MS	13.39	50	848118	2.26	-7.30	NA
1,2-dibromo-3-chloropropane	MS	14.08	50	1170654	3.12	-4.50	NA

